

ACCIDENTS IN MINES—CAUSE AND RESULT.

SIR,—The publication of the accompanying tables is important to the mining interests. The first table exhibits the causes from which accidents in coal mines arise, and their relative frequency and importance. The Act now under the consideration of the House of Commons refers to some of the accidents in columns 1, 7, 8, 11, 15, and 24. In addition to the mortality from accidents, upwards of 3000 colliers die annually from diseases of the lungs, caused or increased by "poor air." These will be affected more or less, according to the wording of the first general rule of the above Act. A large number of deaths ensuing from accidents after a lapse of months or years do not come under the notice of the inspectors, and are not included in these tables. In one mining parish, it was ascertained "that out of 240 families receiving relief upwards of 200 were

miners' families, and that of the fathers of those families 15 had been killed in the mines; 40 had been blinded, maimed, or so injured otherwise by mine accidents, as to be unable longer to earn a livelihood, many of the injuries at different distances of time having terminated fatally; while 65 have died, and 15 others, who had among them 80 children, were dying more or less slowly of miners' consumption."

The second table exhibits the increase of the number of accidents in Great Britain, at the same time that the number of deaths has not increased.

The third table exhibits the ratio of mortality in Prussian mines, which in the depth, inclination, and thickness of the seams of coal, more nearly resemble British mines than those of any other country.

Clifton, June 18.

HERBERT MACKWORTH.

No. I.—CLASSIFICATION OF ACCIDENTS IN BRITISH COAL MINES.

Year.	District.	Explosions of Fire-damp.	Falls of Coal.	Falls of Stone.	Total Falls in Mines.	Over-winding.	Ropes and Chains Breaking.	Whirls Ascending or Descending.	Falls into Shafts or from Surface.	Things Falling from Surface.	Falling from part way down.	Things Falling from part way down.	Miscellaneous in Shafts.	Total in Shafts.	Explosions of Gunpowder.	Suffocation by Gases.	Irruptions of Water.	Falling into Water.	On Inclines Underground.	By Trams Underground.	By Machinery Underground.	By Machinery on Surface.	Boilers Bursting.	Miscellaneous on Surface.	Total on Surface.	Gross Totals of Accidents.		
1851	Scotland.....	2	12	33	45	2	2	4	4	2	3	4	7	28	0	2	0	0	1	0	0	2	5	2	0	84		
1852		5	9	14	23	0	2	2	3	3	3	3	3	19	0	0	0	1	1	1	1	4	9	1	0	57		
1853		10	6	25	31	3	1	5	3	0	5	3	1	21	1	2	0	0	0	0	0	0	0	0	0	0	69	
1851	Northumberland, Durham, Cumberland	10	10	21	31	0	1	0	5	1	3	3	2	15	1	0	1	0	3	16	1	5	27	2	0	10	12	95
1852		10	13	31	44	0	3	6	3	0	4	0	2	23	1	1	0	0	2	19	1	0	24	5	2	15	116	
1853		8	16	39	55	0	1	8	4	1	4	1	2	27	2	1	0	1	2	16	2	5	29	5	7	14	133	
1851	Yorkshire, Derbyshire, Nottinghamshire, Warwicksh.	17	11	18	29	0	1	0	7	3	7	0	3	21	0	0	0	0	0	2	0	1	3	3	0	2	5	75
1852		11	12	21	33	1	5	3	8	0	5	2	2	26	3	1	1	0	3	6	0	2	16	2	0	2	5	90
1853		35	13	32	45	1	1	12	5	3	7	7	1	37	1	3	0	1	3	3	3	1	15	1	1	3	137	
1851	Lancashire, Cheshire, North Wales.....	31	13	42	55	1	2	14	10	4	10	4	1	42	1	3	0	1	3	3	3	3	13	1	0	3	137	
1852		21	14	53	67	1	4	12	2	3	2	10	2	36	3	2	0	1	2	8	1	2	0	3	7	151		
1853		21	14	53	67	1	4	12	2	3	2	10	2	36	3	2	0	1	2	8	1	2	0	3	7	151		
1851	Staffordshire, Shropshire, Worcestershire	20	71	36	107	3	7	11	23	2	3	4	11	64	2	0	0	0	0	1	0	8	11	2	2	6	208	
1852		20	91	31	122	2	3	9	23	3	5	4	1	45	1	1	0	0	0	1	0	2	5	3	0	5	8	200
1853		22	82	24	106	6	2	7	29	5	5	7	6	60	4	2	0	0	1	0	1	0	1	8	1	0	1	198
1851	South Wales, Monmouth, Gloucester, Somerset.....	14	22	28	50	2	5	4	1	1	2	5	22	1	1	0	0	0	1	0	4	7	1	4	1	6	99	
1852		14	18	38	66	1	5	6	6	1	2	3	20	5	1	3	0	2	0	0	1	12	2	3	5	10	112	
1853		18	20	43	63	1	5	5	10	1	5	3	3	34	3	1	0	0	3	7	1	0	15	2	0	8	10	149
1851		13	20	48	68	0	3	6	6	3	6	3	34	1	1	0	0	3	8	0	0	17	2	0	5	7	139	

No. II.—ACCIDENTS IN BRITISH COAL MINES.

Year.	District.	Number of Fatal Accidents.					Number of Deaths ensuing.				
		Explosions of Fire-damp.	Falls of Coal and Stone.	In Shafts.	Miscellaneous, Under-ground.	On Surface.	Explosions of Fire-damp.	Falls of Coal and Stone.	In Shafts.	Miscellaneous, Under-ground.	On Surface.
1851	Scotland	2	45	28	5	4	84	32,061	2-5	4-5	52
	Northumberland, Durham, Cumberland	10	31	15	27	12	95	42,437	2-2	3-3	32
	Yorkshire, Derbyshire, Nottinghamshire, Warwickshire, and Leicestershire	17	29	21	3	5	75	33,195	2-2	4-1	26
	Lancashire, Cheshire, and North Wales	35	45	37	15	5	137	36,243	3-7	5-0	70
	Staffordshire, Shropshire, and Worcestershire	20	107	64	11	6	208	32,449	6-4	7-5	41
	South Wales, Monmouth, Gloucester, and Somerset	14	50	22	7	6	99	38,932	2-5	3-3	15
	Total	98	307	187	68	38	698	216,217	3-23	4-5	321
1852	Scotland	5	23	19	9	1	57	5	23	24	8
	Northumberland, Durham, Cumberland	10	44	23	24	15	116	38	44	28	24
	Yorkshire, Derbyshire, Nottinghamshire, Warwickshire, and Leicestershire	11	33	26	16	4	90	22	33	28	19
	Lancashire, Cheshire, and North Wales	31	55	42	13	5	146	91	56	57	20
	Staffordshire, Shropshire, and Worcestershire	20	122	45	5	8	200	25	134	46	6
	South Wales, Monmouth, Gloucester, and Somerset	14	56	20	12	10	112	83	57	26	39
	Total	91	333	175	79	43	721	264	349	209	116
1853	Scotland	10	31	21	7	0	69	15	31	27	8
	Northumberland, Durham, Cumberland	8	55	27	29	14	133	19	58	29	30
	Yorkshire, Derbyshire, Nottinghamshire, Warwickshire, and Leicestershire	11	33	26	16	4	90	22	33	28	19
	Lancashire, Cheshire, and North Wales	21	67	36	29	7	151	99	71	40	29
	Staffordshire, Shropshire, and Worcestershire	22	106	60	8	2	198	35	115	63	13
	South Wales, Monmouth, Gloucester, and Somerset	18	63	34	15	10	140	36	63	39	15
	Total	90	355	204	95	37	781	226	373	228	105

* The numbers of 1852 repeated.

No. III.—DEATHS IN PRUSSIAN MINES.

Year.	Description.	Amount raised.	Workmen employed.	By Falls of Minerals.		In Shafts.		By Gases.		By Machinery.		Miscellaneous Accidents.		Totals.	
				Total.	Per 1000 persons.	Total.	Per 1000 persons.	Total.	Per 1000 persons.	Total.	Per 1000 persons.	Total.	Per 1000 persons.	Total.	Per 1000 persons.
1853	Coal Mines	7,860,537	41,398	36	0·869	18	0·435	18	0·435	15	0·362	2	0·048	89	2·149
	Lignite Mines	3,342,988	7,929	6	0·757	3	0·378	...	...	1	0·126	...	...	10	1·261
	Metalliferous Mines	24,509	13	0·530	5	0·204	6	0·245	1	0·041	2	0·082	27	1·102	
	Other Mines	£648,753	2,683	8	2·982	...	...	...	...	...	...	...	...	8	2·982
	Total	...	76,519	63	0·823	26	0·340	24	0·314	17	0·222	4	0·052	134	1·751
1852	Coal Mines	36,039	29	0·805	12	0·333	8	0·222	7	0·191	3	0·083	59	1·637	
	Lignite Mines	7,599	16	2·105	2	0·263	1	0·132	...	...	...	...	19	2·500	
	Metalliferous Mines	18,366	8	0·461	4	0·230	1	0·057	1	0·057	4	0·230	18	1·635	
	Other Mines	2,394	8	3·342	...	...	...	...	...	...	...	...	8	3·342	
	Total	...	63,388	61	0·962	18	0·284	10	0·158	8	0·126	7	0·110	104	1·640

NEW METALLIC ALLOYS.

Messrs. de Ruolz and Fontenay, of Paris, have invented an alloy, which may be employed for almost all purposes to which silver is usually applied. The improved alloy is composed only of silver, copper, and purified nickel; which metals may be combined in any suitable proportions, but the following are preferred:—Silver 20 parts, nickel from 25 to 31 parts, and the rest up to 100 parts in copper. An alloy is thus produced containing 20 per cent., or thereabouts, of silver, and constituting silver of the third degree of fineness, thus reversing the proportions of the ordinary composition of the second degree; this latter containing 800 parts of silver and 200 of alloy, whereas the improved compound contains 200 parts of silver and 800 parts of alloy.

The copper employed must be the purest obtainable in commerce; and the nickel should be purified by some suitable process. The means preferred for the purification of the nickel are as follows:—When treating impure nickel of commerce, the metal is to be dissolved in a mixture of hydrochloric and nitric acid, or in dilute sulphuric acid. In the latter case the dissolution must be expedited by electric or galvanic agency, and the operation should be carried on in vessels of platinum. The solution is then submitted to the action of a current of chlorine, and the iron impurities precipitated therefrom by boiling with carbonate of lime,—care being taken not to have too great an excess of this latter substance.

The nickel is then precipitated by carbonate of soda, and taken up again by hydrochloric acid, and diluted with a large quantity of water. The solution is then saturated with chlorine gas, and an excess of carbonate of baryta is added thereto. The liquor must then be left in repose in a cold state; and the nickel may either be precipitated in the metallic state by means of a galvanic current, or precipitated in the form of an oxide, which oxide may afterwards be reduced to the metallic state in the ordinary manner.

When treating speiss, take of this substance 100 parts, nitre 20 parts, and saltpetre 100 parts. By this means, cobalt is produced in the state of oxide. This is to be roasted and washed, and dissolved in sulphuric acid. The remainder of the process is to be effected in the manner above described for the treatment of impure nickel.

Although the proportions above given are those generally employed for the production of the improved alloy, the proportion of silver may be varied, increased up to the following limit—silver 30 parts, nickel 31 parts, and copper 39 parts: total, 110 parts.

It is advantageous, first, to melt the copper and nickel in the granular state, and afterwards to introduce the silver; and the flux to be employed in this case consists of charcoal and borax, both in the state of powder;

and the ingots obtained are to be rendered malleable by annealing for a considerable time in powdered charcoal.

The patentees claim the production of an alloy composed of silver, copper, and nickel, in whatever proportions these metals may be combined, which alloy has all the appearance of real silver, and may be used for various purposes as real silver.

In connection with the above invention, Messrs. Ruolz and Fontenay, have also patented some improvements in the treatment of certain metals for producing an improved metallic alloy, which consist principally in additions to, and modifications in the process, before described.

It has been found by experiment, first, that this new combination of metals can be so far advantageously modified as to employ the following proportions—copper as high as 49 parts, nickel 31, and silver from 20 to 40; making a total of 100 to 120.—Second, that phosphorus can be usefully introduced into these alloys, and, in certain cases, extracted after the required effect has been produced by it.

The nickel and copper are first melted, then brought into a granular state, and are afterwards replaced in the crucible and re-melted; after which the silver is added. The best flux which can be used is an intimate mixture of borax and powdered charcoal. The ingots, when obtained, must be slowly annealed at a cherry-red heat, in a closed vessel, with powdered charcoal.

As to the use of phosphorus:—1. If it be required to obtain cast articles, such as statuettes and objects of art, a certain quantity of phosphorus must be introduced into the combination. The introduction of phosphorus can be effected in several manners—first, by melting the mixture of the three metals with a mixture of equal parts of acid phosphate of lime and powdered charcoal, brought to a red heat. Secondly, the mixture of the three metals may also be heated together, with a mixture of 100 parts of phosphate of lime, 50 parts of sand, 75 parts of borax, and 10 parts of charcoal. As regards the relative proportions of the metallic alloy and the phosphorated mixture, described above, the following are the most suitable for cast articles:—1000 parts of the alloy of silver, copper, and nickel, and about 150 parts of the phosphorated mixture. The quantity of phosphorus to be added depends upon the length of time taken in heating. Thirdly, the following method is the most preferable. The operation is as follows:—Phosphuret of copper is prepared in the ordinary way, and its richness in phosphorus is ascertained by analysis. This phosphuret of copper is then re-melted and granulated; after which the following mixture is melted:—Phosphuret of copper 49 parts (of such a strength as to

be capable of introducing into 100 parts of the alloy from 1 to 20-100000 parts of phosphorus), nickel 31 parts, and silver from 20 to 40 parts, or more, as desired by consumers. It should be well understood that the silver must not be introduced into the alloy until the phosphuret of copper and the nickel are completely melted, and combined or mixed. The effects produced by this introduction of phosphorus are to augment the fusibility of the alloy, causing it, when melted, to run in a very limpid state, to obtain a closer grain, to avoid all porosity, and to have a greater homogeneity, and finally to render the whiteness greater.

2. In order to preserve the advantages arising from the presence of phosphorus when articles are required to be forged, rolled, or stamped, it is necessary, during this operation, to restore the ductility and malleability which the phosphorus has to a great extent impaired. To effect this, after having obtained regular and homogeneous ingots by the aid of the phosphorus, the phosphorus must be almost totally eliminated or abstracted, which may be effected by submitting, during a long time, the metal to a cherry-red heat, in a close vessel, with powdered charcoal.

The patentees claim the introduction (and in certain cases the elimination) of phosphorus in the manufacture of alloys of silver or other metals.

Original Correspondence.

ON THE TREATMENT OF GOLD-BEARING MINERALS, &c.

SIR,—Mr. Hopkins, in his letter of June 5, states, "I can also well conceive that the products of small experiments in the laboratory, melted with excess of borax, and, perhaps, refined with excess of lead in a cupel," &c. Now, as Mr. Hopkins has entered into details, and suggested experiments that might possibly have been made in the matter of fine gold, I have much pleasure in stating how I was assured the gold in question was fine, otherwise I should have left the subject as it was in my last. The gold from Devonshire was in a compact, very ferruginous gossan; that from Wales in quartz. Each sample was crushed as much as possible, and the metallic gold separated by means of a sieve; the gold so obtained was thoroughly cleansed from earthy matter, and assayed in the ordinary manner by which bullion is assayed—that is to say, a given weight was taken, and cupelled with lead; it suffered no loss, therefore no base metal present. It was then inquarted with silver, parted, and treated in the usual manner, and still no loss; it was, therefore, pure gold, *ab origine*.

Having treated on the assay of gold-bearing minerals, I now pass on to the treatment on the large scale, commencing with the most simple example—viz, that of washing for alluvial gold. I need scarcely remark that this was the earliest process employed, and under certain conditions—that is to say, where the gold exists in sands and other finely divided matters, which are not of a very clayey or talcose nature—it is certainly the cheapest, because the apparatus required is of a very simple construction; but where it is intended that the largest possible yield of gold shall be obtained, then it fails, and will be superseded by other processes. In the case of very clayey or talcose matters, a very considerable portion of the gold is carried off by the wash water, and under no circumstances whatever it is possible to obtain all the gold, or, rather, practically, all the gold by mere washing. I have treated substances that have been so washed in Australia, and all the gold available by that process obtained, and have yet been enabled to extract as much as from 1½ to 3½ ozs. of gold per ton.

The washing process is very simple. In the Brazils a hide is employed; the stuff to be dressed is washed by means of water over the hairy side of the hide, the interstices between the hairs retaining the gold, and the earthy matter is carried away by the water; the gold is removed from the hide by washing the latter in a vessel of water. The gold so obtained is further washed in hand vessels.

In some places, in lieu of the hide washing, tables of wood are employed; these have a series of transverse notches cut in them, in which the gold collects. In other places, boards covered with cloth or flannel are employed. This latter plan was until lately employed in the Austrian provinces, for extracting gold from stamped quartz, &c., but it is now abandoned, direct amalgamation having been found more economical.

The method of washing by cradle, &c., has often been described in your Journal. I now come to the process next in order of obtaining gold from its matrix—that is, by fusing, &c. In extracting gold in this manner, the mineral containing it is reduced to a tolerably fine state of division, and calcined, if it contains much pyrites; if pyrites is not present, some must be added, and the whole fused. This furnishes a regulus, or, as it is termed in the continental smelting houses, a *matte*, which contains a certain portion of the precious metal present; this *matte*, or regulus, is again calcined, and again fused. By these alternate processes it very much diminishes in quantity, and the gold contained thus becomes concentrated; but it must be specially remarked that much gold is lost by every repeated calcination and fusion, so that by the time the concentration is carried to the necessary extent some 50 per cent. of the gold is lost, even in moderately rich samples, first by being carried off in the slags, and secondly by volatilisation. The concentrated regulus is again calcined, and fused with lead; the latter metal takes up and dissolves the gold present. The precious metal is then separated by cupellation, and if it contains silver, which it generally does, the two metals are parted in the usual manner. It will thus be seen the treatment by fire involves many processes, and consequently much loss, besides which the wear and tear of furnaces and cost of fuel is very considerable.

I may here mention, while on the subject of treatment by fire, that Bousingault recommends that iron pyrites containing gold should be calcined before washing, so as to render the difference of specific gravity between gold and pyrites greater—that is to say, that the oxide of iron formed during the calcination has a much less specific gravity than iron pyrites; therefore, in washing the gold ought to be much more readily obtained. In practice, however, this was found not to be the case; it was, therefore, abandoned.

In the same way calcination has been recommended before amalgamation; it is, however, perfectly useless, excepting much arsen

tains about 11 ounces per ton. The loss of gold in this latter case is 35 per cent., that in the former case, in which the stamped ore is passed directly to the amalgamating mills without washing, is not 25 per cent., showing the superiority of treating the ore as it comes from the stamps, or other contrivance for reducing it to the necessary state of division. As I shall hereafter show, this latter loss is due to the construction of the mills, and the fact that all the gold does not exist in the metallic state. I hope to continue this subject in your next week's Journal.

Assay Office, Dunning's-alley, Bishopsgate. J. MITCHELL, F.C.S.

THE VESUVIAN PHENOMENA.

Sir,—It is not because such names as Humboldt, Fourier, &c., have asserted that the Tellurian orb was once an igneously fluid mass, or that the remnant of this supposed primordial high temperature still keeps the interior of our earth in a molten state, and that the cavities and trajectories of volcanoes are in connection with this centro-orbital molten sea, and derive their erupted floods of lava and showers of stones and cinders therefrom, that we are either to believe the dogma, or refuse to reason on the subject.

Even supposing, with Herschel, Bessel, and other geometers, that our orb was formed by the condensation of nebulous matter, it can be shown that a very high temperature never resulted from the aggregation of this vapouriform comical matter; and other equally valid considerations attest the high improbability of the interior of our earth being occupied by igneously molten matter.

The depth to which volcanoes penetrate has been approximately estimated, upon good data, and found not to exceed seven to eight miles; and whilst the erupted matters are derived solely from materials that do not exceed in density 2.5 times that of water, and the mean density of the earth is about 5 times that of water, it must follow that, far below the volcanic sources, the density of the compounds must at least equal 7.5 times that of water.

That the earth is a hollow sphere, we have no proof; but that its rind encloses enormous empty cavities, both analogy and the fundamental mundane laws of planetary motions sufficiently attest; and that the cause of volcanic throes and earthquakes is referable to the action of water on combustible components, the peculiar and invariable character of erupted bodies conclusively shows. That veins of potassium, sodium, silicon, boron, magnesium, and other similar bodies of a powerfully re-active nature, in contact with water, permeate the rocky structures below, the composition of asteroid-aerolites proves, and the variable nature of erupted matter, according to locality, shows that the geological structure and composition at eight or ten miles deep, if not as far as solid matter goes, closely resembles the *loded* rocks at surface; for whilst 90-100ths of the lava of all places partakes of that common composition resulting from the re-action of water upon aluminium, calcium, magnesium, tin, iron, chlorine, sulphur, silicon, carbon, potassium, and sodium, in variable proportions, producing pumice, rhyolite, the meteoric dust of aerolites, olivine, basalt, dolerite, diorite, and labradorite; particular volcanoes yield rare products, as boracic acid at Volcano in the Lipari, and in the Sicilian lagoons connected with Stromboli and Etna; copper, lead, and arsenic, from the volcanoes in the Andes; barium, from Hecula; selenium and arsenic, from Mount Erebus; but gold, silver, and platinum, from none.

To complete this chain of reasoning, it is not necessary that the sea should break in upon these deep-seated veins of aqueously combustible matters, as lakes of considerable extent, containing fishes unknown in surface waters, exist in all parts of the sub-structure of our planet.

Mr. Naumy has transcribed, without reflection, the absurd notion of the Plutonian school; whilst Capt. Matthew Francis, truer to fact, has got into the error of Poisson.

The diurnal motion of the earth being normal, the centrifugal force must be regular also; and if volcanoes derived their supplies of eruption from the molten central mass, their eruptions would assume the character of a calm and quiet overflow, in place of periodic violence, determined thereby by the constant centrifugal force.

That the earth is hotter the lower we descend, I deny beyond a certain moderate limit; and the annals of Cornwall attest, in your Journal, that rocks of the same depth differ in temperature, the one from the other, 15° to 20° Fahrenheit.

An increase of density of the earth would necessarily be attended by a diminution in the orbital period, but it is a fact that, in the lapse of 3000 years, this yearly period has not increased nor diminished one minute of a degree—in fact, not any appreciable quantity either way.

Sherborne-lane, City, June 14. WM. RADLEY, Ch.E.

THE COAL MINES INSPECTION BILL.

Sir,—The letter from the miners' deputation, which appeared in your last week's Journal, conveyed to my mind painful feelings and heartfelt regret, as the interest of the colliers cannot possibly be viewed by me as a matter of indifference, or of slight moment. I watch the result of every step taken in advance by the deputation, the coalmasters, and the legislature with an anxious solicitude, and a faint but steady hope that Sir G. Grey will not unduly listen to the demands of men whose principal object is to make fortunes by any means, and neglect all that is sacred and intellectual, to gratify a morbid sensibility, for the sensual enjoyments of sordid wealth. I am quite willing to concede the fact that the importunities of the coalmasters in pursuit of filthy lucre are by no means contemptible, and the powers at their disposal are neither slight nor insignificant; but still I conceive that the high and paramount duties of the legislator must eventually triumph over every difficulty which impedes their just, full, and sacred accomplishment. It is this consideration which supports the joyful anticipation that the Home Secretary will give full weight to the simple but eloquent representations of the miners' deputation, and legislate with a view to raise the standard of intellectual and physical labour, and increase considerably the difficulty of accumulating wealth apart from intelligence and social worth. With respect to the proposed alterations of the Coal Mines Inspection Bill, now before Parliament, which have been feelingly animadverted upon by the deputation as fraught with unfavourable consequences to the safety of the miners, I beg to suggest, with all deference to the views and opinions of others, that the word "adequate" be freely conceded by the deputation, if the masters have any objections against its use. "Means of ventilation shall be provided, so that there be at all times a sufficient current of air through the workings to dilute and render harmless all noxious gases." This rule appears to me to be as binding on the part of the masters to supply efficient ventilation as if the word "adequate" were employed. On this point there can be no just ground of complaint; but surely the contemplated Act should specify the limits of diluting the noxious gases with atmospheric air. There is a sufficient margin in the explosive mixtures of atmospheric air with sub-carburetted hydrogen to admit of the establishment of a minimum limit, below which the mine shall be considered unsafe.

In reference to the fifth clause in the Act, to which an objection has been preferred by the masters, I fully concur in the views expressed by the deputation. It is, indeed, to say the least, mean in the lowest degree to insinuate that the Government Inspectors "may be prejudiced and partial in their conduct." How can the masters imagine for a moment that an Inspector can so far forget the important nature of his mission, and sign a code of laws, the object of which is the safety of hundreds of men, if in his opinion such laws are inadequate to accomplish the objects in view? I believe that no Inspector will submit to such a humiliating condition, and the language of the miners' deputation on this point is encouraging, when they state their belief that Sir George Grey is not disposed to yield this just and necessary point to the ungenerous surmises of the masters. Miners' deputies, in full possession of enlightened minds; by this means you raise them on a pedestal, for the sole object of scorn and contempt to point their "slow unmovable fingers at," as a despicable offering on the shrine of low, moneyed despotism. I feel certain that, when you leave London for your homes and your families, you will carry back with you the just impression that the legislators, the aristocracy, are not only not your oppressors, but they manifest a strong sympathy in your sufferings and neglected condition. You are the victims of that inordinate desire to make money, for which England is distinguished amongst the nations of the earth; and so long as the workmen continue to worship the idol of wealth, in preference to higher and nobler acquirements, so long will they feel the baneful effects of low, moneyed tyranny, one of the greatest evils to which a nation can possibly be subject. You have been told that the Germans, with the small pittance of 3s. per week, are happier and richer than you with 3s. per day. How is this? The Germans cultivate their intellectual powers, and, as a consequence, domestic economy, together

with every mental endowment which is calculated to make a wise distribution of the comforts and necessities of life. On your return, then, try to teach your marrows that unity, intelligence, and virtue, are alone the means by which they can hope to raise their condition; tell them that a countenance beaming with intellectual light, when confronted with men whose souls are absorbed in acquiring riches, is as "terrible as an army with banners." I do not think it is right to bind the masters to artificial means of ventilation, as there are extensive coal mines in the midland counties to which natural ventilation, with the addition of sometimes a cupola, is quite ample, providing the air courses be properly cleaned. Before the Government inspection took place this was sadly neglected, as I have seen air courses, in collieries not without fire-damp, in such a state that a man could with difficulty creep along them; indeed, I have been myself jammed fast in them. The immaculate mines of the north are not entirely free from this accusation. I have one observation to make to the miners' deputation, and it is in reference to their appeal to the colliers. I grant that information is most needed, and most courted, by the wisest and most intelligent of men, therefore the deputation have acted a noble part in asking to "discern between the good and bad," but I do think the beauty of this request is defaced, indeed, by the further demand for "what cash they can spare."

The coal masters, of course, can pay their own expenses, and consider it an honour to do so, in order to represent the interests of their competitors; but the miners' deputation, though honourable in the extreme, cannot follow such an example. As, however, they have been sent by 100,000 colliers of the northern counties, I cannot escape the conclusion that means should have been taken to provide amply for the expenses of the deputation before it arrived in town. The expenses are trifling when divided amongst so many; and, therefore, the deputation ought not to be subject to the humiliating condition to ask for money through the public press. I trust the advertisements in the *Mining Journal* of last week respecting the Mining School at Truro will not be successful in deceiving parties, that after two years' schooling they will return first-rate miners. Will a disquisition, however learned, on the method of riding enable any one to ride successfully without great practice on the back of Pegasus himself? Will a philosophical exposition of the principles of hydraulics be conducive to the art of swimming, without plunging into the "angry flood," and "with lusty sinews throwing aside, and stemming it with hearts of controversy?" Will the bare learning how a thing is to be done enable any one to do it when required, without having done it before? Will 20s. per annum enable those who are practically engaged in the development of mines to attend the mathematical, chemical, and metallurgical lectures of such an institution? If not, then the conclusion is obvious, that the advantages of the Mining School at Truro are not superior to those of other establishments of less pretensions for the education of youth. The practice of mining cannot be taught like Euclid and the differential calculus; it must be obtained practically in the mines. Let no one deceive himself on this matter. I know what it is to work physically, and I am not ignorant of the powers of mathematical and physical science, with their application to the arts, and I contend they are worse than useless in the hands of those who are not practically and thoroughly acquainted with the business to which their application is designed.

I regret, also, to perceive, by the tone of Mr. Dunn's letter, that unity does not exist even amongst Her Majesty's Inspectors of Coal Mines: this is to be deprecated by all well-wishers of the interests of the colliers. I have been accused several times of attempting to depreciate the labours of the Inspectors; but, I ask, have I done a hundredth part as much to lower the Government Inspectors in the estimation of the mining public, and, therefore, render their labours contemptible, as the letters of Mr. Dunn and the insidious suspicions of the coal-owners? A house divided against itself cannot stand.—June 19.

THE COAL MINES INSPECTION BILL.

Sir,—The new Mines Inspection Bill is again postponed for another week. The owners or managers of collieries have held a numerous meeting, at the Craven Hotel, Strand, on Wednesday last, and from a report which has reached us, from a good source, it is stated that they do not agree with some clauses of the bill as remodelled by Sir George Grey, more especially the clause which relates to the Inspectors having to approve of the rules before certifying the same. It appears the owners request that two colliery managers of the district shall arbitrate between the Inspector and any owner of a colliery where any dispute may arise, and that five individuals, colliery engineers or viewers, shall be named to the Secretary of State by the owners of each county; and out of those five the said two to be selected by the Secretary of State, thus constituting a permanent staff of arbitrators throughout the country. They (the owners) had another interview with the Home Secretary yesterday, and urged the utility of their proposed method of dealing with cases of dispute between the owners and the Inspectors.

The miners' deputation, having represented to Sir George Grey that such arbitrators should be neither directly nor indirectly connected with the trade, have agreed to leave clause No. 5 as it stands in the new bill, and to leave the appointment in the hands of the Home Secretary. It is curious to observe how some parties, in so public a matter, will show themselves to be looking after home. The owners desire arbitrators of their own class. Why not the miners have a choice in the appointment? Surely they are as much interested in the choice of proper persons as the coal owners. But they are deeply interested, so far as life and health are concerned, have agreed to leave the appointment to the Secretary of State. But not so the owners; they, it appears, would rather have it so ordered that they may help each other out of any difficulty, &c. It is to be regretted that the owners of many collieries present at the gathering of the trade in London, and to whose pits the most stringent regulations might never practically apply, have been induced by parties who dread any such regulations to sail in the same boat; and because the presence of the owners or managers of the worst managed pits, and who necessarily dread further stringent measures, are the most numerous at the said meetings, and thereby constituting the majority, that such owners of the best managed pits are obliged by such majority to seek to destroy some of the essentials of the bill.

With regard to the masters' demand, that mining engineers ought to be the arbitrators, it is not manifest that, if such arrangement should become law, it would inevitably bring the Inspector of the district in collision with the said arbitrators, thus producing discord, and creating that very prejudice which the owners allege might sway the Inspector in his judgment; whereas, the appointment of arbitrators by the Secretary of State could not possibly be liable to such objection. Again, should it be conceded that the arbitrators shall be two viewers, it would be only fair that the working miners should be empowered to nominate half of the said number from which the Home Secretary shall select. But even then full justice would not follow from such a course, inasmuch as the miners would have their choice limited to mining engineers, and as birds of a feather, &c., it would be Hobson's choice.

Looking at the matter fairly, and making allowance for great interests involved in the right solution of this question, we may state that, seeing it has been admitted on evidence many times over, and practically demonstrated also, that the better the ventilation of the pits, the more careful the management; the greater care taken to prevent accidents, the more advantages accrue to the owners. Why is it, then, that the said owners obstinately stand out against the just interference of the State on such important matters. Here we have annually sacrificed about 1000 lives, whilst it is admitted that a proper inspection would at least diminish that number 50 per cent. The Inspector of the North, besides other practical men, have demonstrated that by a good ventilation great saving comes home to the owners in the preservation of timber alone, besides the preservation of the various other materials, which the loaded air quickly destroys. Then, the longevity of the workmen, the better attendance at work, and the pride and consolation which would naturally follow to the owner, that having done all that was requisite to secure these results, he could lay his head on his pillow and sleep without fear.

In some collieries, which have been lately visited by some of the deputation, it was ascertained that about a fourth of the workmen never performed a full week's work, the stagnant condition of the air producing lung diseases; and it was pitiful to see some of the workmen having to stop and rest several times before reaching home. Such is not an isolated instance, but a case that is too general in every county. These are the cases that want legislation. The whole need not a physician, but the sick only. Shall we discard the medical practitioners because the large majority of the community are in good health?

With the hope that the Legislature will stand by the cause of humanity, and, as in duty bound, protect the poor and industrious collier, despite the influence which the coal owner can bring to bear against the working colliers and the cause of justice, We are, Sir, yours respectfully,

D. B. GALLOWAY; A. TAYLOR; } Miners'
E. GRAY; AND M. JUDE. } Deputation.

PRACTICAL MINING—MR. ENNOR AND "G. D."

Sir,—Absence from home has prevented my seeing your Journal for the past fortnight: on my return, however, I discover "G. D." again in the field. It was not my intention to have entered into any discussion respecting the contents of my series of letters until I had closed them, as one thing is quite sufficient at a time: it was, therefore, unfair of "G. D." to interrupt until I had finished my subject. I have only to say that they are my guides, and watchfulness and practice have proved them to be correct.

As regards "G. D.'s" questions, I have before informed him that, if he carefully reads my letters, he will find them all answered. In return, he has not met one question put to him, further than referring me for proofs of his Hungarian gold remarks to some book, but which, as every man who knows the rudiments of mining is aware, consists of false assertions.

I was not aware that I was out of temper in any of my remarks; but if so, my name was attached, as I should be ashamed to make use of unbecoming language, and particularly so in a cowardly, anonymous, and ambiguous manner. Respecting the 50 mines which "G. D." wishes me to name, I am sorry to tell him that that number far exceeds all I have ever recommended, though I am aware that I have come out the most openly of any man who ever entered the mining field, and in opposition to old trumped-up theories, naming mineral districts, and the results of mines, with a thousand eyes upon me, and not picked up yet, which is gratifying to me; and I challenge all my numerous employers to furnish me with the name of a single mine that has turned up a trump which I advised them to get rid of, notwithstanding their having previously received 100 reports advising them to sink deeper. Let me see the stratification, and the lodes in it properly laid open, so as to ascertain its bearing and dip; and if I am not correct in my report, I will return my fee east when called on. I saw the report on Great Wheel Baddern last week, which mine I ex-

posed three years since; and if my employers will publish my report, it will be found to agree with that of last week, with the exception that I did not state the east ground would pay a dividend to value.

If "G. D." will come out in his true character, and is approved of as being worth my time, I should be most happy to go over any part of my former subject, or any other he may name; and if he knows so much of mining as he attempted to display in his last, I will go through any number of mines he may name against him, each publishing their reports, and he tested by results—I care not who he is.

As to borrowing from Mr. Hopkins's book, I beg to tell "G. D." that I was known in the mining field long before Mr. Hopkins entered it. I have never seen his second edition; but this amounts to nothing, as I know no valid reason why two men should not entertain the same opinion, and it only adds weight to their views. It was remarked to me on my way home, by eminent men, that "G. D." had a letter out, and that the said "G. D." was no other than Mr. Hopkins himself. To this I demurred, as I feel assured that Mr. Hopkins would not so far forget himself as to come before the public, using improper language, under an anonymous shield. Between all parties, I am certainly placed in a very awkward position. Three years since, I was taunted as being a tool of Mr. Hopkins, only putting my name to his letters. On his leaving England, it was hinted that I should be heard of no more. Now, they have the audacity to say I have robbed him of his birthright. There please my word never to write in the Journal with an anonymous signature; neither will I ever again reply to any one so writing.—Wieliscombe, June 19. N. ENNOR.

ADMINISTRATIVE REFORM IN MINING SPECULATIONS.

Sir,—It is pleasing to observe that the English capitalists are beginning to open their eyes, to see the imperative necessity of rousing shareholders to prepare for a crusade against those who have been defrauding the public under the mask of mining for so long a period. The few respectable mining brokers who are engaged in legitimate business are endeavouring to make arrangements to correct some of the evils connected with the dealings in shares, but they cannot effect the object without public support. They have resolved that "no person shall be elected a member who is engaged in any other business than that of a mine broker, or dealer in shares." And further, that none but those who will faithfully transact their business on just principles will be allowed to become members. The public, therefore, should support legitimate brokers, and should avoid having any transactions with those who do not act in conformity to the rules.

This, however, can only be considered as a good beginning in the right direction, but it by no means sufficient to correct the great evils attending mining speculations, which have brought such enterprises to their present state of degradation.

Not a week passes without some painful exposure; all sorts of trickeries are resorted to to gull the too credulous public. The most respectable capitalists shun the name of mining, more especially if under the management of share dealers. Our best and really honest practical mining agents are obliged to leave the country, or become the degraded instruments of jobbers. The least symptom of professional zeal and honesty is regarded as a great inconvenience, and much too good to suit the present system of working mines. Indeed, merit and truth become social offences, and have, in fact, long been so regarded by those who get up companies from jobbing and self-interest.

This state of things has caused a number of gentlemen to consider the propriety of forming a kind of Club, or some other convenient place where they may meet, and be in communication with mining agents, and where they may examine all prospectuses and reports, but totally unconnected with the Mining Exchange brokers and share-dealers. A place where gentlemen may meet to obtain information on all mines before they invest. None but the truly legitimate ones to be entered in their list. It is proposed that all mines managed by share dealers are to be discouraged, and that all dealings in shares should be confined to the members of the Mining Exchange, who conform to certain specified rules. It is also proposed that two or three respectable and independent practical mining agents should join their body, and give their opinions and reports on all matters coming before them, so as to guide all those who choose to invest in legitimate mining, and thus enable them to avoid dangerous schemes. If these projected plans can be carried into effect legitimate mining will soon recover its position; it is the duty of every member of society to support such a desirable object.—June 21. VERAX.

MINING DEALING—SHARE JOBBERS.

Sir,—Knowing that your valuable Journal is at all times open for correspondents, to expose any malpractices with which they may become acquainted, I enclose an extraordinary circular, which I received a few days since, from a party to whom I am a perfect stranger; but, as it refers to the Alfred Consols, I suppose, as a shareholder in that mine, it must have been sent without the intent, no doubt, of so depressing the shares that I might be induced to part with them. Now, how the parties could have found out my name and address (a private individual), I am at a loss to know. I never had any transactions with them, and they are perfect strangers to me; and what appears the more strange to me, is their recommending to exchange Alfred Consols for shares in Kilraine, a mine I never heard of, nor any one else that I know. I regret giving you so much trouble in the matter, but I showed the circular to several brokers here, and they all advised me to send it at once to you, well knowing how you would handle it.

In fact, some of the shareholders must have been given up to this party, or how could they have known mine? This alone is convincing proof to me of the great value of the new Mining Exchange, whose business it should be to enquire into the matter. I may, however, add, that instead of shaking my confidence, and that of others here, in the Alfred Consols, it has had the contrary effect.

London, June 14.—Sir: We hear very unsatisfactory accounts of Alfred Consols Mine, and fear that the property is rapidly declining. We, therefore, strongly recommend an exchange thereof, at 11½, which is the present market value, in favour of Kilraine, at 8s. per share. Kilraine is turning out one of the finest properties in the country, and taking into consideration the favourable terms upon which it is held—viz., 20 years, at 1.20th royalty, together with the facility with which the ore is obtained, and the small amount of labour required, it will, in our opinion, become a most lucrative investment. For your satisfaction, Dr. Daly, of 82, Stephen's-green, Dublin, will answer as to our responsibility and respectability.

We are, Sir, yours, &c., WATSON AND ENSLOW.

THE TEES SIDE MINE.

Sir,—Some of the shareholders of this mine complain that they have not been able to see my report, and have applied to me for a copy. I have referred them to the purser, as I think all such reports ought to proceed first from the managers. However, to-day I received a circular, purporting to be the account of the last meeting, held on the 8th inst., at Mr. Reynolds's office, in which it is stated "that Mr. Hopkins's report of this mine being contradictory, and inconsistent with the former one, no dependence whatever can be placed upon either."

This requires no comment—the object is evident, and I trust that there is a sufficient number of gentlemen amongst the shareholders to take up the matter immediately with copies of the reports submitted to, so that they may judge where the alleged contradiction lies. My last report enters fully into the present state of the mine, and its defective machinery, &c., as well as other points deserving the serious consideration of the shareholders, whereas the former report only gave a short sketch of the prospects of the mine according to the appearance of the surface lead-bearing beds, which have been almost neglected, and the large expenditure which has been incurred has been on the deeper workings, which ought to have been left until the upper levels justified such an outlay.

It is no business of mine to interfere with the shareholders' affairs, but when I detect such glaring attempts to blindfold the shareholders at my expense, I consider it a duty that I owe to the public, as well as to myself, to put an immediate stop to them. The public are requested to beware of private circulars. I, therefore, trust that the shareholders will not allow this matter to pass without strict investigation. If judiciously undertaken, it may lead to the correction of many other evils arising from mismanagement and misrepresentations.

Thurloe-square, June 21. P.S. I suspect the mine agent also has not been able to get a glimpse of my report; but I am glad to find that he is attending to the most important points, and avoiding all other expenditure, until the shareholders decide what is best to be done under the existing circumstances.

ENGLISH GOLD MINING.

Sir,—I should have been better pleased if you had inserted my letter sent you last week, as in justice to myself I think I ought to have been allowed to correct some misstatements in the personal attack that appeared in the Journal of June 9, more especially as your correspondent was unable to contend with me upon the scientific point of the question.

In last week's Journal, "G. W." seems to want to settle the question of Gold in England by my experiments at East Alfred. I am so confident in my often-tried methods, that I am quite willing the subject should stand or fall by the result of any one of my experiments. I could name at least 20 mines in England where there is sufficient gold to allow of its being worked upon a commercial scale, and which would yield very handsome profits; but before I can put East Alfred upon that list I must know something more about it, for I have never yet set foot underground; but of one thing I am quite certain, that there is gold present in several of the heaviest grass upon the moor, and my coming experiments are not so much to prove the existence of the precious metal as to discover whether it pervades any great extent of available stuff. I may likewise add that it is not my intention to use either calcining or any other furnace upon East Alfred, for if I cannot adopt the methods I know will succeed, I will not waste my time with the unsatisfactory results that would be obtained from processes I have little or no faith in.—189, Strand, June 20. J. CALVERT.

GREAT WHEEL MARTHA.

Sir,—Allow me, as purser at the time this mine was suspended by the former company, to correct some of the misstatements made by an anonymous correspondent in your last Journal. That the mine is exhausted is contradicted by the report of Capt. Stephen Paull, published in another column of the same paper (a singular coincidence that the antidote should be found so near the poison), who says there is a great deal of ore ground standing that can be let on tribute at 10s. in 1l., as soon as the water-wheel can be erected, which, I believe, has been decided upon.

"Caradon" argues that the mine is not the more valuable on account of adjoining the Devon Great Consols, because Tamar Maria and Wheal Williams are failures. Any miner acquainted with the district must know that the lodes worked upon in those sets are to the south of the Great Wheel Martha lode. If the great lode at Wheal Martha is the Devon Great Consols lode, then the other two mines cannot have it; and as they have not hitherto done any good, it favours the presumption that they have not got the Devon Great Consols lode, and that Great Wheel Martha has got it. This supposition is confirmed by some of the most experienced and scientific mineral surveyors in the country; and Mr. Josiah H. Hitchman, who discovered the Devon Great Consols, and whose judgment has been proved to be correct respecting the dividend-paying mines of Ilington Down, South Tamar, and Bedford United, and also of the promising new mine, Sortridge Consols, he having been the successful promoter and manager of all of them, has expressed his belief that the main part of Wheal Martha, or Devon Great Consols lode, must pass through the Great Wheel Martha set. But the practical results actually obtained at the Great Wheel Martha go still further to prove that they have the Devon Great Consols lode, about 6000 tons of copper ore having been raised and sold from it. The late Mr. Musket worked a considerable profit when the standard was very low; and so far from his having abandoned the mine, as is represented by "Caradon," he or his executors, sold it to the late company for the sum of 4000l.; after which they expended a large amount of capital in sinking a new shaft and other work, which is available for the purposes of the present proprietors. There are about 400 fathoms on the course of the lode to the east of the old workings, or towards the Devon Great Consols, still unworked. To develop this ground, a new shaft was commenced by the late company, at about the

the last six months 126 tons 1 cwt. 3 qrs. 19 lbs. of black tin, producing 7529*l.* 8*s.* 4*d.* and making a total of sales from the commencement of 465 tons 1 cwt. 3 qrs. 3 lbs. producing an amount of 26,43*l.* 12*s.* 9*d.* The value of plant on the "Flow" and dressing floors is estimated at 5190*l.* 13*s.*

ON THE MAIN LODE. Trelawny's whim-shaft is cleared of stuff, timbered and collared

up, complete from it to surface. This shaft is clear and fit for use below the adit, as far as the water is drained. Nine shafts have been cleared and secured on the main lode. East shaft is collared up, secured, and a permanent footway fixed in it from surface to the 80 fathom level, and will be continued down as the water is drained. Bank shaft has been opened, collared up, and made complete to the adit level. Grey ore shaft has been opened, collared up, and made complete, and in working order as deep as the 30 fm. level, under adit. Jolly's shaft has been opened up, cleared, and a permanent footway fixed in it from surface to the 50 fm. level. Footway shaft has been cleared, secured, and a permanent footway fixed in it from surface to the 40 fm. level. Flat-rod shaft has been cleared, collared up with masonry, and made secure as deep as the 33 fm. level. Wheel Vreah engine-shaft has been collared and made secure to the 70 fm. level. Stands and shieves have been erected from Cross's steam whim to this shaft, and by virtue of the said whim we have cleared this level of stuff eastward to the present end. Gate shaft has been cleared and collared as deep as the 20 fathom level, and a permanent footway fixed therein. Williams's, Goldworthy's, and Andrew's shafts have been cleared up, secured and collared as deep as the 20 fathom level, and a permanent footway fixed in each of them.

On WHEAL ROSES LODG, Ivey's shaft has been opened up, cleared and collared, and made secure from surface to the surface. Corn shaft has been cleared and collared up, and a footway fixed in it, from adit to the surface.

The half-yearly meeting of proprietors was held at the London Tavern, on Wednesday, Mr. H. W. SCHNEIDER in the chair.

On GAWWEE LODE. Powder-house shaft has been cleared, collared, and secured, from the surface to the 20 fm. level, and a permanent footway fixed therein. Sand-bank shaft has been collared up, secured, and cased from adit to the 20 fm. level, for the purpose of drawing stuff. A new shaft has been sunk from surface on this lode 10 fathoms deep, but in consequence of an excess of surface water, is suspended in the ground. On CRASSIE LODE. A shaft, north of Crease's engine-shaft, called Elvan shaft, has also been cleared and secured from adit to surface. Having particularised the surface erections, and work done and progressing at the surface, we proceed to the operations underground, including the drainage of the water. The original plan of operations for the drainage of these mines, detailed in our previous reports, is being proceeded with in a very satisfactory manner. The first shaft, from the water to the 104 fm. level, and since last meeting (20th December) we have drained from the 35 to the 104 fm. level, at Crease's.

WHEAL VON MAI LODGE—Since the last meeting (20th December) we have cleared the 70 fm. level at Crease's east to present end, a distance of 30 fathoms from shaft. Here we find a large and rich lode for tin, which we have commenced driving on. There is no doubt we shall lay open very valuable ground at this point. The ground now standing in the back of the level will set at about 20 fms. from shaft. The 60 fm. levels, east of Crease's, end at the level of the 70 fm. level, and as both these ends are about to be immediately commenced driving these two levels, and expect good results from them. The levels below the 70 will be cleared and explored as fast as the work is drained. The 60 fm. level west has been cleared from the cross-cut at Crease's west to Coal-yard shaft; here we find the backs nearly all removed by the former workers, who must have found it all pay to take away. The 50 fm. level, east and west from grey ore shaft, has been cleared, east 50, and west 20, fathoms, and the 40 fm. level, east and west from the same shaft, has been cleared, east 20, and west 10 fms. At this point there is a very good quality of ground standing in whole and unexplored, and from the success of the operations of the former workers here, we expect our future researches will be equally successful.

In addition to this lode, we have discovered lodes to the north and south, standing in whole ground, and entire and unexplored below the adit; cross-outs to these can be commenced as soon as it is found advisable. Hitherto, and at present, our object has been to concentrate the resources of the company on the drainage of the main works, till we reach the bottom, where we know we shall find tin in large and paying masses, diverging only to the limited extent mentioned in our report, and then in these points only, where we have to expect an early profit.

account.—Great Wheel Vor : The balance to the debit of this mine on the 31st March is £43,922.0s. 2d. The value of the machinery, buildings, and plant on the mine, with the cost of erection, amounts to £8,000*l*. The report of the managers will fully inform the proprietors of all that has been done in the drainage and working of the Great Wheel Vor United Mines since the date of their last report, and which the committee feel convinced will prove entirely satisfactory to the shareholders. Looking at the progress which has been generally made, and the present extremely satisfactory position of the various workings, which, upon the raising of the ore, will undoubtedly give a considerable margin for profit, the committee feel that the time has arrived when they can with prudence recommend the shareholders to reduce the number of shares actually held by them. The committee recommend that the dividend shall be at the rate of 5 per cent. free of income tax. For this purpose it will be necessary, according to the principle of the cost-book, under which the company was established, to call in all the shares for registration; and the committee think it advisable to take this opportunity of recommending to the shareholders to reduce the number of shares, by dividing the concern into 26,666 parts or shares, in place of 113,333 thus making the shares of the value of 5*l*. each, paid up, in lieu of 1*l*.

On the other hand, the deepest level yet cleared is the 45; we shall proceed to clear the deeper levels as soon as Crease's steam winch can be spared for this purpose, stands and shies have been erected on Wheel Vreah old engine-shaft, to expedite this work. There is good reason to believe that a large quantity, very valuable ground will be laid open on this lode as the lode is within the cross-cuts. The same amount was raised by the former workers as deep as the 70 fm. level, where, we are assured, the lode is still standing, worth 50L per fathom. As this lode is in close proximity to the main lode, cross-cuts at the different levels may be put to it comparatively lightly and the same cross-courses which caused the main lode to be so rich in respect to this lode, and different depths, in the most economical manner.

On Grosvenor Lane, since the last meeting (20th December), the 10 m. level has been driven east of Sandbank shaft to Woolf's caunter course 11 fms. 3 ft. 4 in., and south of Woolf's caunter lode 7 fathoms, where we have cut the lode; we are now driving east on the lode, and are about 5 fms. east from Woolf's caunter course. In this level there is at present a good course of tin, and the lode is standing in whole to surface. In consequence of this important discovery, we have commenced a cross-cut at level 20, where we are expecting to cut the lode, and find it valuable. It may be observed that this lode is in whole from this caunter lode to the eastern boundary, a distance of 500 fathoms. A winze has been sunk from the 10 to the 20 fathoms level west of the caunter course, for ventilation, and to prove the lode; the ground about and below the 10 m. level is set on tribute.

We may here remark, that Woolf's caunter course is one of the lodes which produced the extensive deposits of copper ore, which yielded such large profits to the adventurers in the Dolphyn Bridge Mine. This property which is in close proximity to the northern head of the Great Wharf, is Untried.

has been cleared off since the last general meeting, 60 fms. south from Trelawny's engine-house: and one shaft sunk for the purpose of conveying the water from the condensing cistern and boilers of Trelawny's 35-inch engine, leaving about 20 fathoms more to clear, at a cost of about 3s. per fathom.

At Widdow's Wharf, the tide-gates, which have been in operation at the different stages of the tide, during the night hours, for the last six months, and are now discharging large quantities of tinstuff, broken by the tutworkmen and tributaries on the Main Groyne and Sozen lodes. A large quantity of old materials have been withdrawn and new placed in their stead.

northern boundary of the 4-m. level on this canyon, south from Sandbank shaft, to cut the ledge at about 20 fms. north of our present end, on the course of the gossan, 9 ft. wide. This shaft is now down about 4 fms., in a most promising position, gossan, 9 ft. wide. The ledge is here about 13 fms. thick, or 13 ft. 6 in. on the course of the gossan, 9 ft. wide. The Polladras adit has been cleared south from the outlet since last meeting, 50 fms. In these places the operations will steadily progress. Trew adit has been cleared since the commencement 48 fms. 3 ft. 2 in.; of this 22 fms. 6 ft. 5 in. has been cleared since last meeting. The object of driving this level is to get the water under a supply of steam last meeting. The object of driving this level is to get the water under a supply of steam last meeting. The object of driving this level is to get the water under a supply of steam last meeting.

WHEAL METAL. No. 1 engine-shaft has been sunk since last meeting 11 fathoms and is now down to the 70 fm. level; the lode at present in the bottom of the shaft is worth 70*l*. per ton. The 70 east (No. 43) is 2 fms. from shaft; lode worth 50*l*. per ton. The 70 west (No. 42) is 2 fms. from shaft; lode worth 50*l*. per ton. These two levels are large, and of a most promising description, and the shaft is now situated in the midst of a large extent of productive tin ground. Now that the two levels (70) are clear of the shaft, we shall immediately recommence sinking it to a rich, and doubtless continuing, course of tin. We expect the lode at about the 80 fm. level, the junction of the south lode with the present lode, to be a fine one, when judged from analogy, and from the experience of all our junctions which have occurred in the course of the present year, and I have no doubt, but that the expected junction

engine are fixed, as the other surface works, with the bobs and rod in the shaft, we are getting ready during the drainage of the water, and will effect a saving, from the actual experience of trials made in other mines, of full 40 per cent, on the amount of fuel required by the miners in their respective bargains. The steam piston and cylinder of Trelawny's 22-inch engine, and the condensing water in their respective parts, including the condensing work, are in a forward state, and will be completed as soon as the pitwork can be placed in the shaft. Trelawny's 22-inch is completed and ready to work. The whim cage, steam capstan, with shears, shaft tackle, stands and stays, will be completed by the end of this month, when we shall immediately send down the 22-inch engine, with steam, and shears, and shaft tackle, and working well, and will effect a saving of 25% per month, at an original cost of 2000*l*. and, when fully supplied with water, besides sawing timber, will drive the turn-

The 60 east (No. 3) is driven from engine-shaft 22½ fathoms, of which 18 5/8 ft. have been driven since the 2nd of July 1901; the 60 west (No. 2) is driven in this level from the shaft 20 fathoms, of which 40 ft. have been driven since the 2nd of July 1901; the 60 north (No. 4) is driven in this level from the shaft 20 fathoms, of which 40 ft. have been driven since the 2nd of July 1901; the 60 south (No. 5) is driven in this level from the shaft 20 fathoms, of which 40 ft. have been driven since the 2nd of July 1901; the 60 west (No. 2) is driven 23½ fms. from engine-shaft 22½ fathoms; ground stoped since last meeting, 20th December, 11 fms. 2 ft. A winze (No. 6) has been communicated from the 50 to the 60; the lode in this winze is 11 fms. 2 ft. long; the 50 has been worked 30 ft. per fm. The 60 west (No. 2) is driven 23½ fms. from engine-shaft 22½ fathoms; ground stoped since last meeting; this lode has been worked 30 ft. per fm. of which 19 fms. have been driven since last meeting; this lode has been worked 30 ft. per fm. places upwards of 50 ft. per fm.; the end at present is a good lode for tin, and will improve. The stopes (No. 37) working in the back of this level are 30 ft. per fm. The 50 to the 60, and communicated; this has laid open valuable ground, now worked 30 ft. per fm.

The 30 west (No. 4) is driven 48 fms. west of shaft, of which 18 fms. 0 ft. 4 in. have been driven since last meeting; the level at this bottom of this level, west of No. 5 winze, and present position of the stopes. The stopes in the level of this level, west of No. 5 winze, at present worth 40f. per fm.; ground stoped since last meeting, 12 fms. 5 ft. 1 in. The stopes (No. 9) east of No. 5 winze, in bottom of 50, are worth 20f. per fm.; ground stoped since last meeting, 17 fms. 5 ft. 10 in. In the stopes (No. 6) in bottom of 50, east of engine-shaft, the lode is worth 15f. per fm.; ground stoped since last meeting, 33 fms. 2 ft. 4 in. The 50 east is driven 37 fathoms east of engine-shaft, of which 6 fms. 4 ft. 9 in. have been driven since last meeting, with the lode occasionally worth 20f. per fm.

The 40 east (No. 11) is driven from shaft 63 fms., of which 10 fms. 1 ft. 8 in. have been driven since last meeting; the lode in the present end is worth 15f. per fm. A winze (No. 35) has been communicated from the 30 to the 40; this winze has, of course,

good tribute grain. Another winze (No. 36), west of Ivey's, has been sunk to the 30 to the 40; the men are driving from the bottom of this winze towards the end, and have now 15 fms. to hole; the lode in this winze has opened ground on an average, 15 ft. per fm. Both these winzes have been sunk since last meeting. A winze (No. 40) has been communicated from the 40 to the 50 fm. level on an average, 20 ft. per fm. The men are now stopping east and west of the winze, in ground on the 50 fm. level under the shaft (No. 13) is sunk from the commencement to the 50 fm. level under the shaft 8 fms. 3 ft. have been sunk since last meeting. We have also driven a east in the 30 on the lode, working from the 30 to the 40. The cross-course, is disordered and the shaft (No. 40) west of No. 13, is sunk since last meeting 3 fms. below the 40 fm. level. The men are now stopping east and west of the winze, in ground on the 40 fm. level under the shaft; the lode is large, producing good stones of tin, and when down a little further will, we anticipate, strike at a convenient spot the new lead of ore which we expect to see shortly coming down in the Metal lode from the westward.

From the discoveries made during the last month on the Sidles lodes, on ground owned by the Sidles family, and on the Sidles lode, and Woolf's caunter copper lode, in ground yet unworked, and from the steady improved prospects at Wheal Metal, where we have a rich course of tin in the engine shaft, as well as in the 70 east and west, and at other points westward, as well as the favourable prospects observable in the eastern and western ground of the mine, and generally in the whole ground on the different lodes of the property, and the water has been draining we are strengthened in the opinion which we have expressed, that the withdrawal of the water will be of great benefit to the mine.

shafts for droppings and fixing, and shall then go down very fast. Our average draining whilst the engine has been at work at Crease's, irrespective of stoppages to the ground, fixing lifts, &c., has been full 6 ft. in 24 hours (during the last week we have been working at Crease's) and we are confident our drainage will go on with much greater speed, with the additional security that, should anything happen to stop one engine, the other will be working and thus the drainage of the water from the mines be very greatly facilitated.

The *Pirbright* at 144 ft. shaft, with the timbering and setting of the shaft from the 144 ft. to the 85 ft. level, and the construction of the larger diameter bobs-plats in the edit, 30, and 70 ft. levels, and including main rods, stays, cable connections, balance-bobs, house-lift, and every necessary appendage to the 144 ft. level, will be completed by the time the 85-in. cylinder engine will be got ready.

water from these mines.

The value of the preliminary work is already done, and the output of permanent works incurred, and the plant, buildings, and machinery now existing on property may be roughly estimated to be worth to us, irrespective of the flow, \$600,000.

The discoveries and reserves of ore in the Metal and other lodes are about 80 million tons; it may be permitted to estimate the Metal at \$10 per ton, and the other ores at \$1.50 per ton, making a total value of about \$1,200,000, or \$1.2 million. It is the time these minerals have been developed, and we are convinced that nothing but patience, and the means of developing them, therefore, are necessary to bring these mines to the most prosperous condition, and to realize the full every anticipation of success we have ever hoped for, and to realize the

The CHAIRMAN, in moving the adoption of the report, said: "I have considerable satisfaction in the state of the mine at the present time. It is a very good ore, and, from the indications, the captains of the mine are very sanguine of obtaining much larger returns, and he had no doubt, as the shareholders commenced paying dividends, they would continue to do so, the amount of the dividends would be steadily increasing. They had heard the report of the managers, and the amount of the profit, and he was of such a character that the working would be continued, and the mine would be worked to the very handsome return for the outlay. The whole of the indications had, in fact, been very encouraging than either the committee or Messrs. Crease had expected. He was glad to hear that Mr. COLF COLE wished that some of his friends from the West, East, and South, were present, to have heard the reports and the observations of the Chairman; that they

be remembered, they had made a profit of 14. 10s. per ton, but in this case a whole day's work had been charged, where only a few hours had been employed.

Mr. COOPER stated that he had heard an impression was abroad, with several shareholders, that they had no confidence in the undertaking while Sir Henry Huntley was in the management; he had no ill-feeling towards that gentleman, and he wished to enquire whether the directors intended to continue him in his situation.

The Chairman replied, that if the shareholders made it a question between Sir Henry Huntley and Mr. Frankland, their opinion was decidedly in favour of the latter. Sir Henry Huntley had, no doubt, been actuated with the best intentions, but they could not disguise the fact that he had been very unfortunate in his calculations. It was then voted that a committee of shareholders should be appointed, to consult with the directors on the present position of the company, the committee to be nominated by the directors. A vote was passed that the remuneration of the directors should be reduced from 1200s. to 600s. per annum.

A vote of thanks was given to the Chairman, and the meeting separated.

Mining Correspondence.

BRITISH MINES.

ALFRED CONSOLS.—The lode in Field's engine shaft, sinking below the 130 fm. level, is worth for copper ore 40s. per fathom; the lode in the same level, east of this shaft, is worth for copper ore 80s. per fathom; the south lode in this level, east of this shaft, is worth for copper ore 16s. per fathom. The lode in the 100 fm. level, west of this shaft, is just as last reported. The lode in the 50 fm. level, east of the shaft, is very much improved since the last report, it being now from 1 to 2 feet wide, and will yield from 1 to 2 tons of copper ore per fathom, worth 9s. fathom, having a very promising appearance, both lode and ground by it. This is promising to be of great value to the mine at this moment. The north lode, in the adit level, is just as reported last. All other parts of the mines are just as for some time past.—M. WHITE: June 18.

APPLEDORE.—Having inspected this mine during the past week, I was quite astonished to see such a property in so dormant a state. There are five splendid lodes opened on the backs, composed of gossan, and other properties connected thereto, in a beautiful stratum of ground. I believe it cannot fail of making a rich and lasting mine for silver-lead. The lode in the adit level is sufficient to justify any outlay of capital, if there was no other lode in the sett. It is our opinion the former party drove too far east of the lode; from all appearances, the lode is still left in the western part of this level. I would advise a cross-cut through this lode, and by continuing this you will cut another lode, about 4 or 5 fms. further west, which can be seen in a pit from 5 to 6 feet, composed of splendid gossan, &c., and upon which nothing has been done. There is also a large champion lode east of all the others yet discovered, 12 ft. wide, and I would recommend you to open upon the lode forthwith. My opinion is your former operations were not so successful as they might have been. I am informed that there is another valuable lode in the sett which is not yet opened on.—J. BENNETT: June 21.

BOILING WELL.—In the past month we have sunk 8 ft. at the engine-shaft. We are now 8 fms. below the 50, and are still going on well; the eastern end in the 50 is now 16 fms. from the engine-shaft, driven on the south part of the lode, nearly the whole of which will be worked away on tribute; this end is still producing good stones of ore, but not so good as it has been; the western end in this level is now 8 fms. from the engine-shaft on the south part of the lode, which produces fine stones of ore at times, but very changeable; the lode is not settled in this level. The eastern end in the 40 is leaving tribute ground in the back and bottom of the level; this end will produce from 1 to 1½ ton of rich ore per fm. The eastern end in the 30 is looking promising in appearance; the lode is 4 ft. wide, composed of spar, mixed with black lead, and copper ore; this level is also leaving tribute ground in the bottom. The east whin-shaft is now 6 fms. 3 ft. below the 30; with good speed we shall hole this shaft to the 40 next week. We have also sunk 6 fms. on the north lode below the adit; this lode is about 1 ft. wide, very promising in appearance; it is composed of spar, peach, and mixed throughout with black ore, underlying south about 2 ft. in a fm.—G. REYNOLDS: June 16.

BOTTLE HILL.—In the 123 cross-cut the ground continues hard and wet, which greatly retards our progress in driving. In the 112 fm. level south the lode is 2½ ft. wide, composed of capel, peach, and mundle, with stones of tin occasionally. In the 101 fm. level west the lode is 13 in. wide, composed mostly of capel, with a branch of spar and mundle about 4 in. wide, composed of the south part. The stones throughout the mine are yielding favourably. We shall ship our last parcel of tin for the Bisco Smelting Company to-morrow.—J. GIFFORD: June 20.

BUTTERDON.—The engine-shaft is sunk 18 fms. below the 30, where the lode is 14 in. wide, composed of an of a most promising character, spotted with lead and mundle.—T. GREENFELD: June 19.

BYRN-FORD HALL.—The stone west over the 50 fm. level, on Miller vein, now yield 1 ton to the fm., and the eastern about 15 cwt., but this stone is at present suspended, and the men put in the rise to obtain a communication for its further prosecution, which we expect will be completed by to-morrow. The levels continue with no material alteration in this and the Chert vein, in which we find a little ore, with the same favourable indications. The sump under the day level is now down 2 fms. The pitches at Matthews's are doing pretty well, and we have now a pitch going at Miller old workings.—W. FRANCIS: June 21.

CAE-GYNN.—The 20 east is producing a little lead ore and blende. The 20 east is flushed with ore, and we are expecting an improvement here daily. The stones are looking well. The winze is producing good lead.—E. STEEDMAN: June 20.

CALSTOCK UNITED.—In the past week the lode at the sump shaft has again changed its underlie to its old course south; the branch of mundle, spotted with copper, named in a former report, continues on the footwall, the ground remains the same for sinking. There has been nothing done in the cross-cut south, nor in the lode going west, this week, from my having been obliged to take the men to open a piece of ground for a balance-bob pit, to steady and help the working of the engine; we have also been obliged to strengthen the loading on part of the engine-house, as there is a great strain on the masonry of the old loading. The men will finish the work by Monday next, when they will return to their old bargain, and the masons will commence building the walls of the bob-pit.—W. COOK: June 16.

CAMBORNE CONSOLS.—The lode in the 33 fm. level west, on the counter, continues a foot wide, producing good stones of ore. In the 20 west the lode is 3 ft. wide, with stones of ore. The 50 and the 33 fm. level cross-cuts north progress favourably.

CAROLINE WHEAL PROSPER.—Our underground operations here are much improved within the last few days, and I am also glad in being able say our shallow adit level is now just getting into the change of ground—viz., that of a beautiful white killas, and the lode is also becoming more compact, and is also likely, from its present appearance, to be more productive of tin than we have found for the last few years in driving. In No. 1 stop, in the back of this level, we have a very regular lode, and which is also producing good stones of tin. In the No. 2 stop the lode varies in size from 1 foot to 6 inches wide, producing saving work for the stamps. In the deep adit level the lode has been rather disordered the last 2 fathoms in driving, but is now looking much more promising. I think, from the appearance to-day, we are just going to have the same character lode as we had in the wheel-pit over, and which was very good for tin. The wheel and stamps we purchased at the sale at South Plain Wood Mine we have all fixed, and are working well; we are also preparing a drawing machine to work on the other side of the wheel; this, I hope, will be finished and set to work by the early part of the coming week. Our sample of tin from the batch we are preparing, and which we sold in Truro last week, brought 61s. 5s. per ton. We hope to take out the east-iron which has come away from the new stamp heads, and in so doing we may in all probability make a better price of our next sampling.—W. WILLIAMS: June 21.

CLIJAH AND WENTWORTH.—Julia Lode: Walter's engine-shaft is sunk 5 fms. below the 40 fm. level; sinking by nine men, at 20s. per fm. The 40 fm. level, west of engine-shaft, is extended 7 fms., lode yielding 1 ton of ore per fathom; the 40 fm. level, east of engine-shaft, is extended 6 fms., lode yielding 1 ton of ore per fathom; the rise in the back of the 40 fm. level, east of engine-shaft, is up about 5 feet, lode yielding 1 ton of ore per fm.; we have about 4 or 5 ft. of ground to communicate to the winze sinking below the 30 fm. level. The 30 fm. level, driving east from engine-shaft, is extended 38 fms., lode at present unproductive. The 20 fm. level, driving east from engine-shaft, is extended 50 fathoms, lode yielding 1½ ton of ore per fm. The cross-cut driving south from Wentworth lode is extended about 4 fms., driving by four men, at 3s. 10s. per fm. The cross-cut driving north from Julia lode is extended about 5 fms., driving by four men, at 4s. per fathom.—Wentworth Lode: The 30 fm. level driving east, is extended about 4 fms., lode yielding 1 ton of ore per fm.; the 30 fm. level, driving west, is extended about 4 fms., lode producing good stones of grey and black ore.—J. CUDDELL: C. GLASSBORO: June 16.

CLOWANCE WOOD.—We have commenced sinking the new engine-shaft 25 fms. south of Slater's whin-shaft, and have stopped the adit west for the present. We will send you a full report on Monday next.—J. DELABROS: June 16.

CROW HILL.—The shaft is now completed, with the exception of timbering, which will take two or three days to accomplish, and we shall then begin to drive north to cut the lode.—June 16.

CUBERT UNITED.—At Trebaskin, the lode in the 65, west end, is 18 inches wide, composed of quartz, prlan, mundle, and flookan, with little saving work for lead, about 1 cwt. per fathom; price reduced from 4s. 13s. to 3s. 13s. per fathom. The lode in the back of the 55, west of shaft, are worth about 3 cwt. of lead per fm. The lode in the back of this level, west of James's rise, being rather poor, are for the present suspended, and we have put the men from here with the men in the lode east of the shaft, where the lode is worth 4 cwt. of lead per fathom. At Trebaskin, the lode in the engine-shaft is 20 inches wide, composed of fluor-spar, prlan, and mundle, worth from 1 to 2 cwt. of lead per fathom. The lode in the 66, south end, is full 2½ feet wide, composed of quartz, fluor-spar, and prlan, worth about 7½ cwt. of lead per fathom, and has a very encouraging appearance, indeed. The lode in the back of this level is worth about 6 cwt. of lead per fathom. The lode in the north end in the 66 is 2 feet wide, composed of quartz, mundle, &c., worth 3 cwt. of lead per fathom. The lode in the 66, north of sump-winze, is still small and unproductive. The lode in the 56, south of sump-winze, is 2 ft. wide, composed of quartz, prlan, flookan, and mundle, worth from 2 to 3 cwt. of lead per fathom, and has a very promising appearance for an improvement shortly. The lode in the back of this level is worth 1½ cwt. of lead per fathom. The lode in the 66, south of the shaft, is worth at the rate of 6 cwt. of lead per fathom. We have now on the mine, dressed and undressed, (say) about 15 tons of good lead ore.—J. TREWITT: June 18.

—Trebaskin engine-shaft is sunk about 6 ft. below the 66 fm. level; the lode in the bottom is about 14 foot wide, composed of fluor-spar, quartz, mundle, prlan, and lead, worth for the latter 1 cwt. per fm., and although rather poor for lead, presents a very encouraging appearance indeed. The 66 fm. level is driven about 14 fm. north, and 7 fms. south of the shaft. Our progress of late in the north end has been slow, owing to the hardness of the ground; but, from its appearance in the back of the level, I am of opinion that it will not continue far; the lode in the end is 2 ft. wide, worth 4 cwt. of lead per fm. The south level has been extended since my last report about 34 fms., in which the lode has produced, on the average, about 4 cwt. of lead per fm.; it is now much improved in size and appearance, being 2½ ft. wide, worth at the rate of 8 cwt. of lead per fm.; we have just commenced to stop the back of this level near the shaft where the lode is worth 4 ton of lead per fm. The lode in the back of the 56 fm. level, north of shaft, are worth from 3 to 6 cwt. of lead per fm.; the sump-winze is completed to the 66, and a level driven therefrom 4 ft. north, towards the end, driving back from the engine-shaft; we have now about 1¼ fms. more to communicate, which when completed will be of great importance for ventilation, and advantage in driving and taking away the ore ground to the south of the sump-winze, where, as you are aware, our most productive ground lies; the present end here is unproductive, which, looking at the upper levels, is no other than might be expected. The 56 fm. level is extended about 71 fms. south of the sump-winze; the lode is 30 in. wide, producing about 2 cwt. of lead per fm.; the ground here has of late become very easy for driving, and set at 21. 5s. per fm.;

the lode shows a good appearance; the lode in the back of this level are producing 7 cwt. of lead per fm. At Trebaskin, the 65 fm. level is extended 24 fms. west of the engine shaft; for some fathoms past the lode has produced from 2 to 3 cwt. of lead per fm.; in the present end it is 14 foot wide, producing some saving work, but not enough to value; the ground is easier of progress, and the price for driving is reduced from 4s. 13s. to 3s. 13s. per fathom. A short time will fully prove whether we shall be justified in continuing the operations further at this point of the mine; we have, I expect, from the dip of the elvan, in the upper levels, about 5 fms. more to reach it at this level. The lode in the back of the 55 fm. level, west of shaft, are worth about 3 cwt. of lead per fm.; the lode in the back of same level east are worth 4 cwt. per fm. The Trebaskin lode, although not at present rich at the different points of operation, as is sometimes the case in a bunchy lode, yet its improved character, at the deeper parts, shows indications of becoming much more productive as it is developed in depth, and I see no reason to alter the opinion I have before expressed on this point. I have this day forwarded you a box of specimens from the Trebaskin lode, 66, or bottom level, which will show you not only the character of the lead, but also the beautiful matrix or composition of the lode in which it is embedded, all of which was broken while I was present. Our raisings of lead for a few weeks past, and at present, is not so much as usual, owing chiefly to our not discovering anything at Trebaskin deep level, and the upper productive parts becoming less, nor have the lodes at the Trebaskin of late been turning out so well; but as soon as the communication is made at the 66 fm. level, between Trebaskin shaft and the sump-winze (which we are forcing on with all speed), we shall be in a position to get at the main shoot of ore south of the sump-winze, and do better.—S. RICHARDS: June 16.

CWM DAREEN.—The lode at engine-shaft, sinking below the 30, is still increasing in size, as well as getting more settled, and for the last two days has been yielding some fine quality of copper ore. A Wren's lode in back of the 30 west the lode is not so productive for copper as when last reported, but the lead course is more so. Upon the whole, the lodes have not reduced in value. There is no material change in Evans's lodes in the 30, east of Wren's mill, since last report. I hope to begin driving the 40 some time next week.—A. WATERS.

CWMDYLL.—In Price's level, the lode in the lodes is 3½ ft. wide, producing 2½ tons of ore per fm. The lode in No. 6 level are without alteration since last report. On the Lake lode we have driven 1 fm. at the east end, and expect to reach the lode next week; in the west end the lode is 4 ft. wide, producing 2 tons of ore per fathom. All other workings at the mine are proceeding regularly.—T. COLLIVER: June 16.

DEVON AND COURTNEY.—The lode in the pitch in the back of the 90 fathom level will turn out 1½ ton of ore per fm., worth about 7s. per ton. The lode in the pitch in the bottom of the 80 fm. level east will turn out about 2 tons of ore per fm., worth 7s. per ton; the lode in the pitch in the back of the 80 fm. level will turn out 4 tons of ore per fm. worth 7s. per ton; the lode in the pitch in the bottom of the 30 fm. level west will turn out 1 ton of ore per fm., worth 7s. per ton. We have completed the work to enable us to draw the water from our engine-shaft with the water-wheel, and to do away with our present steam-engine, which will enable us to make a great saving on our present working.—T. BAWDES: June 20.

DEVON BURRA BURRA.—We have during the past week driven the cross-cut a distance of 2½ fms. The ground still maintains a promising character, as it is composed of a light blue killas, with branches of prlan and spar, strongly impregnated with ore, running across the end, and from which also there is issuing a large stream of water; in fact, we have every symptom of our near approach to the lode, although we cannot state exactly the distance we have to drive, in consequence of its not having been proved in any shallow level.—J. LOND: June 19.

DURODE.—The bargain taken last setting-day, to drive the deep adit end 3 fms., at 55s., being completed, I have set it again, at 40s. per fathom, and to wheel the stuff to the shaft, the ground is in a way more mixed with quartz and copper than it was. In the winze sinking under the deep adit the ground is getting kinder, with a greater mixture of copper; we hope to cut the cross-course in 2 or 3 fms. more sinking. In the cross-course, driving south, the ground has been very stiff, but is getting easier, with some good strings of copper. At the East Mine, the lode has been very changeable; it is underlying more south, the quartz rock is getting kinder, and there is a mixture of mundle in the elvan and a little more copper; altogether the lode is looking more kindly for copper. We have had almost continued dry weather for the last fortnight, which retards the working of the stamps.—W. TONKIN: June 19.

DUN RAVEN CONSOLS (GLAMORGANSHIRE).—Our progress in sinking has been retarded during the last fortnight, arising from two causes; first, we have had considerable quantities of rain, which have increased the water in the shaft; secondly, not having sufficient timber to support the collar of the shaft, quantities of rubbish have fallen in. Although our progress has been retarded, I beg to state that the lode in the shaft has a most splendid appearance, and improves as it goes down; the men broke some first-rate specimens of lead ore this day, which augurs well for the future development of the mine. I hand you a list of materials that are now required at the mine:—200 or 300 ft. of timber, iron, steel, shovels, hils, powder, coals, &c. I hope you will soon be down to give orders for the materials, so that the work may be prosecuted with vigour.—EDWARD BENNETT: June 16.

DUNSEY WHEAL PHOENIX.—The lode in the lodes in back of the eastern adit still produces good work for tin. We are progressing favourably with our new engine-shaft, so as to take the Marley Valley lodes, which underlie north. We are getting on as fast as possible with our dressing, so as to get another batch of tin for the market.—J. SPARGO: June 19.

EAGLEBROOK.—The engine-shaft is now sunk 3 fms. 3 feet below the 10 fathom level; the lode is gradually as it descends, and the lode is more lead to be seen; the ground is still harder and letting out much water; the expense of sinking is now 16s. per fathom. In driving the 10, west of engine-shaft, the lode is at present small and not very productive, but we must expect, at intervals, pieces of ground of this sort. In the 10 east we have now reached the north wall of the lode, which is 3 fms. from the south lode, and have commenced driving on what seems the best part of the lode: from its great width the ore is more dispersed in strings through the lode, but the quantity that we can get from the whole width of the lode will be considerable. We have continued to take down the north part of the lode in the 10 east, 34 fms. west of engine-shaft; it is still the same sort of ground—gossan and carbonate of lead, with occasional stones of blue lead; the lode in this place is very promising. We have at present a good supply of water, and all work going on well.

EAST BLACK CRAIG.—The ground continuing hard in the 22 and west, we have put the men to cross-cut north, to ascertain the size of the lode. The rock in the 33 end west has a slight change, there being more sulphur with the blackstone; this is similar to the 22 above. The shaftmen are still drawing a great deal of water from the old men's winze to the west of them; as soon as we ascertain that we are below the old men, we intend putting in a dam and a small lift, and take up this water, so as to prevent it falling further. The rock is very kindly in the shaft, but we can scarcely expect much lead in sinking, as we are in a poor part of the lode. The winze coming down from the 22 is nearly through the lode, which the men are rooming of tribute, and have some fine branches of lead with them. The tribute pitches continue to look much as usual, and the mine in general is in a very good way of working.—R. WILLIAMS: June 21.

EAST WHEAL GEORGE.—There is not the least change in the shaft since last week. The tributaries are working with spirit, and earning fair wages.

EAST WHEAL RUSSELL.—We have a strong lode in the 66 fm. level driving east, being composed of gossan, spar, and prlan, and a great quantity of water coming from the end. The 55 fm. level is driven 7 fms. east of Homersham's shaft; the lode is looking much the same, and still producing good stones of yellow and black ore. Homersham's shaftmen are rising from the back of the 55 fm. level against the said shaft; we intend to make a communication, and put the stuff to Hitchins's shaft to draw it with the machine, instead of drawing it with the tackle and boating through the tunnel. Our operations are progressing satisfactorily.—W. METHERELL: June 21.

ESGAR MWYN.—No alteration in the 25 fm. level west since last report. The lode has increased in size in the 20, and is more regular. We expect the shaftmen will complete their contract in about 10 days.—S. VIAL: J. PAUL: June 16.

FEE DONALD.—Saturday last the following bargains were set:—A shaft to sink on the lode north of the Anthony, by four men, at 8s. per fm. The Anthony level to drive west, by two men, at 4s. per fm. The level to drive east on the lode south of the Anthony, which is much harder than it has been for driving, by two men, at 7s. per fathom. The Smiddy level to drive west, by six men, at 5s. per fathom; to-day we commenced to clear a shaft to get down in the deep level on this lode; and now the road to Strontian is completed we shall at once be able to clear the deep level. In the other parts of the mine, since last report, there is no change, but I expect an alteration in the Smiddy in a short time.—J. MURFET: June 18.

FRANK MILLS.—The engine-shaft is sunk and timbered to the required depth to fix the bearers and elstern, and to commence to drive in the 45. On Thursday night last a lode was discovered to be coming into the engine-shaft from the east side, underlying west about 20 in. in a fathom—a very kindly lode, containing some large cubes of lead, and almost its size, as it is not cut through, except just in one corner of the shaft. Mr. Porter and Mr. Glover were underground here on Friday last; they both express a wish to commence sinking the shaft again as quickly as possible after the new lift is fixed, pit opened, &c. I consider this a very desirable object, as we shall then prove the value of this newly-discovered lode, without going to the expense of driving upon it in this level. I have set to the shaftmen to drive the 45 cross-cut towards the lode, at 3s. 10s. per fathom, the same pace to have 13s. for cutting ground, fixing bearers, elstern, the new 13-inch lift, main rod, balance-bob rods, and everything connected with the alteration complete; the present lift to be drawn to surface, and the shaft driven in front of the main rod from the 30 to the 45 for the above sum. The lode in the north end at present is not looking quite so well as it has for some time past, but it is very likely to improve again shortly; this end was set to drive to the north by six men, at 2s. 10s. per fathom; the cross-cut was set to drive by two men, at 2s. 5s. per fm. I think this end will soon pass through all the lode. If possible, I now feel greater confidence in the success of this mine than I have hitherto expressed to you; seeing this eastern lode falling in with the west lode in depth, it is in my opinion we shall find large deposits of lead. The surface operations are progressing satisfactorily.—J. P. NICHOLS: June 12.

GILMAIL.—In the 30 fathom level cross-cut, north from the engine-shaft, we have cut a branch composed of spar, iron, and tin, but not much to value; we do not consider it to be the main branch. The 10 fm. level is extended 4 fms. east and west of Mitchell's ditto shaft; the branches have a similar appearance as stated in our former report. In the winze sinking below the adit, 20 fathoms west of the latter shaft, the branches present a very promising appearance, worth 5s. per fathom, and likely to improve in depth as it leaves the gossan. In the 10 fm. level, east of Field's shaft, the branches are very regular; at this point we expect an improvement as we get under the tin ground in the level over. The deep adit level, east of the latter shaft, still maintains its size and value, worth 4s. per fm.—WILLIAM JOHNS: JOHN MORCOM: June 16.

GRAT ONSLOW CONSOLS.—The lode in the 60 east is still with ore. The lode in the 72 east yields 10 cwt. of ore per fm. The lode in the 72 west yields occasional stones of ore. The rise over the 72 is being risen at 10s. per fm. The 60 west, on the main lode, is worth 4s. per fm. for ore. The 60 west, on the south lode, is worth for ore 5s. per fm. The 60 west, on the north lode, yields stones of ore. The lode in the 45 west is worth 4s. per fm. for ore. There is no considerable change in the lodes throughout the mine.—G. RICHARD: June 20.

GRAT SOUTHRIDGE CONSOLS.—Hitchins's shaft is now down 15 fms. 4 ft. from surface. During the past week the ground at the shaft has undergone a very great change, so much so that we are daily breaking some magnificent stones of gossan, mundle, prlan, and ore, of the richest quality, which is underlying south towards the main lode. The fact is, that stuff of such a character is rarely to be seen; therefore we cannot but come to one result—to have a good mine.—T. METHERELL: June 21.

GREAT WHEAL BADDERN.—The sumpmen will complete the pit in the 51, and cut sufficient ground for sinking the lift to sink under the 51, on the lode, this week. By sinking on the lode, which is close by, we shall be able to sink 2 fms. where they could not sink more than 1 before. The lode in the 51 east still continues to improve in appearance, though at present not much more valuable than last reported, but it will improve within a very short distance, as the winzeor slopes below the 46 are turning

out very well, worth 15s. per fm. We have not done much in the 51 west, as the men have been employed at capstan some part of the time. The ground is rather hard at present, and lode small; I think it will improve shortly. The lode in the 46 east is without any material alteration, and the 30 is much the same. The tribute pitches are looking well, and the men getting fair wages.—J. ROOKES: June 19.

GREAT WHEAL MARITHA.—I will at once begin the estimate of expense to set the water to the 20, and give you full particulars of the required machinery and materials. You will have heard before this that this portion of Great Wheal Marittha was worked at first by underlie shafts on the course of the lode, the deepest sunk to the 20. From the levels driven on the course of the lode at 10 or 20 fathoms deep, through a large ore lode, much mixed up with mundle, a great many tons of ore were returned, but the very low price, or standard of copper, at the period when these operations were carried out prevented it being remunerative. At the present time, the selling prices of copper, coupled with the advantageous sale of mundle, of which there is an abundance, I candidly give my opinion that it is only to take out the water to make this part of the mine show that Great Wheal Marittha is worthy of a vigorous and expensive trial, the result of which will, undoubtedly, be good after these preliminary works have been effected. A perpendicular shaft to the 20, which would be sunk to the 40, from which a cross-cut was extended to the lode, and a few fathoms driven on its course east, but not anything to the purpose of developing the lode. This shaft is sunk in a most congenial stratum of ground, such as is by most thought productive ground, or ground where large bodies of copper are most likely to exist.—S. PAUL: June 19.

HAWKMOOR.—The lode at the eastern shaft is improved in size and quality this week, and the ground is more favourable for sinking. In the rise in the back of the 30 the lode is 2 feet wide, producing some good floors of ore. At the midway level driving east, the ground is much improved this week, but no lode has been taken down. We expect to cut the cross-course in this level next week. In the 20 east the lode is 18 in. wide, producing a very good work for copper, but we have not taken down enough of this lode this week to say what it is worth per fm. The tributaries are working well, and getting fair wages.—JAMES RICHARDS: June 16.

HERWARD UNITED.—At Henblas, we have been somewhat hindered in making the communication, from having to repair the top of the shaft ready for drawing, but hope we shall be able to effect the former in the course of a week or so, when the present pitches and others to be worked will become more remunerative. The cross-cut in 50 fm. level, driving south-east on Granger's vein, regularly yields large lumps of ore, and looks so encouraging that we shall increase the company of men from four to eight at the setting day, on Saturday next. We have commenced a very favourable trial in placing a company of men to drive north-west from the day level on a vein about 50 fms. north from Old Herward vein. In the prosecution of this trial, several small veins seen to the north will be met with, and at the junction of any of these good and profitable results may be anticipated. Wepe shaft is down 9 fms., the ground being a little easier for sinking. Everything is progressing very satisfactorily. We shall send off next week 9 or 10 tons of lead ore.—J. B. LIGHTOLLER: June 21.

HILL BRIDGE CONSOLS.—The lode in Wheal Jewel shaft is without material alteration since my last report; the ground still continues favourable for sinking.—J. SPARGO: June 19.

HINGTON DOWN CONSOLS.—Morris's shaft and Dodge's winze are completed to an 85, at which depth levels east and west were yesterday commenced. The 85, so far as seen, is very large and ore throughout, but I shall be able to say more respecting its value in another week. Milford's winze is temporarily suspended, in consequence of water, which it is expected will be drained as the 85 is extended eastward. In the 75 east the lode for the part carrying 14 s. wide, but is not quite so rich as when last reported on; it will at present yield from 3 to 4 tons of ore per fathom. In the 65 the driving is in a north-easterly direction, to cut the main part of the lode, which is not as yet reached. In the 55 east the lode for the part carrying is all the width of the end, with a leader on the north part, and the lode per fathom.—South Lode: At Hitchins's shaft, no lode has been taken down, as it is intended until completed to the 75, which will be shortly. The lode in the 65 east has become more regular, and is now 3 ft. wide, composed principally of peach, spar, and mundle, with a little ore—very kindly. The lode and pitches continue much the same as for some time past.—W. RICHARDS: June 20.

HOLMBUSH.—In the 145 fm. level, on Holmbush lode, a further improvement has taken place; the lode in this end is now worth 40s. per fm. A part of this same lode, which was supposed to be further south, has been reached by a short cross-cut, trial, several small veins seen to the north will be met with, and at the junction of any of these good and profitable results may be anticipated. Wepe shaft is down 9 fms., the ground being a little easier for sinking. Everything is progressing very satisfactorily. We shall send off next week 9 or 10 tons of lead ore.—J. B. LIGHTOLLER: June 21.

HOPE VALLEY.—The lode in the 55 fm. level, driving south, is about 2 ft. wide, unproductive. No. 3 pitch, in the back of the 33 fm. level, will yield about 12 cwt. of lead ore per fathom. No. 4 pitch, in the back of the same level, is at present open, and the men have given up. There is no alteration in any of the other pitches. We have not yet received the shaft for the drawing and crushing apparatus, but are daily expecting to hear of its arrival at Shrewsbury.—W. BARRETT: June 21.

IVYBRIDGE.—We are happy to say that the shaft is progressing more favourably, and appears to be in a better condition as we approach the 50 fm. level. The lode in the 35 fm. level south is still of the same favourable character, producing about 2 tons of dressed ore to the fathom, and every appearance of its continuing. In the winze sinking under the 43 fm. level the lode is just the same as we reported last week. The pitch in the back of the 43 fm. level is very considerably improved, and is worth at present 30 cwt. of lead to the fathom, should the level continue as at present the men will do remarkably well, and will at least raise 15 tons of ore in the five weeks. The ground in the cross-cut, and also the new shaft, is as last reported; we are dressing the lead for another sampling as fast as possible; the masons will get up the house for the crusher by this day week, after which no time will be lost in having in the machinery; our engine is working well.—J. CLEMO: H. JAMES: June 21.

KELLY BRAY.—The engine-shaft is sunk 5 fms. 1 ft. below the 90 fm. level; the lode is unproductive, but assuming a more promising appearance, and the ground is more easy for sinking. The lode in the 90 east is 1½ ft. wide, producing good stones of ore; the water is more plentiful in this end. The tribute pitch in the back of this level, 10 fms. east, is, so far, less productive than expected. The lode in the 90 west is 1½ ft. wide, yielding good stones of ore. The lode in the 80 west is 1½ ft. wide, worth 15s. per fm.; this is about 20 fms. west of shaft, and 50 fms. from the western boundary, driving by four men, at 6s. per fm. Other parts are progressing as usual.—S. JAMES: June 19.

LEEDS TOWN CONSOLS.—The cross-cuts at the bottom of the engine-shaft are both in hard ground, especially the north one. The men have commenced driving south on the flookan in the 30, at 30s. per fm. In the 20, east of new shaft, the lode is 2 ft. wide, with stones of tin, but not so good as last week. In the 10, east of ditto, the lode is 14 in. wide, improved since last week, and worth 6s. per fm. At Elty's shaft, sinking under the 16, the lode is 6 ft. wide, and worth 16s. per fm.; we had to go through a poor floor here during the week. In the 10, west of Elty's shaft, we have not yet cut the branch mentioned in my last; east of ditto, the lode is 5 ft. wide, and not rich, being disordered by a horse of killas. On Saturday last I expected to have had tin in the market by our next party; however, I am disappointed, for Sunday the arsenic escaped in such large quantities from the temporary wooden stack we had erected, that had I not instantly stopped the burning and put the fire out, it would have poisoned the cattle in the immediate neighbourhood; we must, therefore, extend our flues some 40 or 50 fms. further. We are getting on with our floors with all possible speed; next week I hope to put one of our carpenters to make the stands for the other axle. Our stamping-engine is working well, and our stuff exceeds my expectations.—P. PASCOE: June 19.

LOVEDEN UNITED.—Our lodes are looking much the same in appearance as they have for the last month past; therefore, being confined to this operation only, I cannot speak of any change.—S. TREVEATHAN: June 20.

LYDFORD CONSOLS.—We have driven about 3 fms. on the course of the lode in the 13 fm. level, south of Richards's engine-shaft; it is about 3 ft. wide, well defined, and composed of flookan, mundle, and quartz, with occasional spots of lead ore. We are carrying the 13 fm. level north under the large to the purpose of a pit for lodging stuff from these drivings; consequently we have not yet cut into the lode, but hope to do so by the end of next week, when I will again write you.—JOSIAS RICHARDS: June 16.

MOLLAND.—The pitch in the back of the 62 fm. level is worth about 7s. per fm. The pitch in the 52 fathom level east is not looking

...to notice the 40 north of Chippenhead's—South Mine: The In-
dies 129, south of Trelawny's shaft, is 2 ft. wide, working 132 per fm.; in the 107
it is 6 ft. wide, worth 66 per fm.; in the same level north it is 2 ft. wide, worth 68
per fm. Trelawny's shaft men having completed fixing the plunger-lift to the 129,
are now making preparations to fork the water to the 130, which we hope will
be effected in a few days. The slope are pitheas are producing much as usual.—Wm.
JENKINS; June 19.

WHEAL TREMAVNE.—The Boundary engine-shaft is sunk 15 feet under the 103
level; the lode in the bottom of the said shaft is 7 in. wide, chiefly composed of
pyrite; the ground is a clean killas, and favourable for sinking. In the 103 fm. level,
of the same shaft, on Allen's branch, the ground is thickly mixed with spar, which
disordered the branch, and is now worth 46 per fm. The slope in the back of the
same level is a waving sandstone, and the slope in the back of the 93 fm. level, east of
Allen's shaft, on Allen's branch, is worth 50 per fm.; this was the best disordered
sp. The slopes in the back of the 73 fathom level, east of the same shaft, on
Allen's branch, are worth 71 per fm. The slopes in the back of the 53 fm. level, east
the same shaft, on Allen's branch, are worth 51 per fm. At the new engine-shaft,
the south lode, in the 70 fm. level, west towards Wharf Margaret, the ground has
in rather hard for driving, which is now is a little eased, and letting go more water;
the same level, east of Arthur's shaft, on the same lode, we have intersected the
th part of the lode, 2½ ft. wide, worth 61 per fm. At the Flat-rod shaft, on the
lode, sinking under the same level, the exposure is favourable for sinking. In the
level, sinking under the same level, east of the same shaft, the lode is 8 in. wide,
worth 77 per fm. The slope in the back of the same level, east of shaft, is worth 76
fm. The slope in back of the 40 fm. level, east of middle shaft, on the same lode,
worth 22 per fm. We are still engaged opening and securing the 40, east of Old
Providence engine-shaft, on the same lode, and are discovering low-price tin-
At Hosking's shaft, on the caunter lode, in the 30 fm. level, east of the lode
is in. wide, composed of flookan, spar, and mundic, with occasional spots of copper
and white lead; the slope in the back of the same level is poor.—R. WILLIAMS;
WILLIAMS: June 16.

WHEAL UNITY.—In the rise over the 82 fm. level, east, against Bunkley's shaft,
we up about 6 ft., the lode is about 2 ft. wide, opening tribute round. In the 70
ft. level, we are still driving south of the lode, which is very good. Several branches,
which we believe that the main part of the lode is still farther south. In the 60 ft. level,
the lode is about 3 ft. wide, worth 51 per fm. for tin and copper. In the 30 east we are
disordered ground, occasioned, we suppose, by Clowance caunter. I note your remarks
respecting Rosewarne Gear, Clowance caunter, &c. In the first place, I
could beg to remark that had the former adventurers in Rosewarne continued the
west they would have discovered the great course of ore that is now giving the
profits in Rosewarne. As far as regards the trial pits at Gear, they are merely clear-
an old engine-shaft that was sunk by a former party. I see no objection to open-
some trial pits towards the boundary. It is very necessary to carry on the work effectually,
and mine labour we ought to drive the Wheal Unit east, and sink down to the
east 30a, per fm.; and when near the cross-course we could drive north and south,
reason and good mining would dictate. The eastern adit is end is at present just below
Clowance caunter. We went about 4½ tons of tin to smelting-house to-day, the
ore, of which I will send to you by to-morrow's post. I am waiting for your opinion
as to how you would advise me to proceed in future.—J. VIVIAN: June 15.

WHEAL WREY CONSOLS.—The engine-shaft is sunk 3 ft. under the 33 fm. level,
the lode in the 33 fm. level north is 3¾ ft. wide, producing ¾ ton of lead per fm.;
the same level south it is 3 ft. wide, producing ¼ ton of lead per fm. In the 23 fm.
level north it is 2½ ft. wide, producing ¼ ton of lead per fm.; in the same level south
is 1½ ft. wide, producing 6 cwt. of lead per fm. In the 12 fm. level north it is
2 ft. wide, producing 2 cwt. of lead per fm. The whole is very good character. We
mined yesterday two parcels of lead ore No. 1, computed 60 tons; and No. 2,
3 tons, for sale on the 27th inst.—PETER CLYMO, JUN.; RICHARD ROSKILLY; WILLIAM
ANCOCK: June 21.

WHEAL ZION.—In the 50, east of the great cross-course, we are carrying about
ft. of the great lode, which is chiefly mundic, with stones of ore. In the 30 west,
the middle lode, the lode is 3 feet wide, producing about 1 ton of ore per fathom.
The winze in the bottom of this level is down 10 feet, and the lode is full 4 feet wide,
producing saving work, about 2 tons per fathom. No alteration to notice this week
any other bargain. The engineers are getting on with the drawing-engine. We
have the boiler and several parts of the engine on the mine, and they are fixing as
fast as they can.—J. BRAY: June 20.

WOOD.—The engine-shaft will be completed 5 fms. below the 15 by Saturday next;
this is the better of the shaft. We shall commence on Monday next to sink, as our
expect a bottom of the shaft. There is a decent lode in the bottom of the shaft, also one
south end of the shaft. No lode taken down in the slopes since my last visit south
end last reported. We have commenced to put ore to pile for market.—J. COCK.

YEOLAND CONSOLS.—Since our last meeting the 46 fm. level has been driven
about 22 fms., through a good tiny lode; the back of this level is standing in
hole ground for 44 fms. long to the 36, making about 440 fms. of productive ground laid
open for stopping away; the ground stopped in the back of this level has been about
fms., and two winzes have been communicated from the 36 fm. level. The 36 fm.
level has been driven east 7 fms., but the lode here is poor; this end is 120 fms. east
of the shaft, the ground stopped from this level is about 20 fms.; there is a large quantity
of ground to be taken away from the backs of this level, consisting of crushed
stone, and the back of the lode is good. We intend to sink the 36 fm. level
and tramway for 15 fms. long, to take it away, which is nearly completed; 100 fms.
east in this level we have put up a rise 9 fms., which we intend to continue to the
surface, for ventilation and other purposes. The 56 fathom level has been driven east
fms., where the lode is good, but we have been obliged to suspend it, and turn our
attention to the sinking of the shaft, in order to drain this end, and thereby facilitate
driving, and the stoppage the ground from this level to the 46 fm. level. The shaft
has been sunk 2 fms. under the 36 fm. level, and the plat nearly completed, but we
are found this most difficult part of work to perform. In consequence of the bad
character of the rock, and the quality of the coal, we have been obliged to suspend the
shaft, having a large amount of practical knowledge, and the best concerted work,
there are occasional spots which are exceedingly difficult to manage, and in cutting
this plat we are unfortunately in one of those places; I feel confident, however, that
we shall in a few days be able to complete it, when we shall proceed rapidly with
sinking and driving the 56 fm. level. The accident we met with in burning the whim
engine-house has been put right, and the engine resumed its work on the 13th inst.,
and we are proceeding satisfactorily. The cost in restoring the engine-house will
not exceed 500.—B. WILLIAMS: June 21.

"Mr. J. B. Brencley, in his Price List, makes the following remarks:—

"In my notes on the causes that have operated to produce such a marked depression
in mining property, when compared with other marketable securities, which have
now reached a considerable length, ranging over a series of weeks, I have touched
upon the several topics which I considered it right to discuss as gently as possible,
consistently with a candid exposition of the subject under consideration, and it may
not be out of place, in closing my observations, to give a succinct *résumé* of the various
causes which I have pointed out as destructive of public confidence in British mining.
On opening the subject, I adverted to the paucity of scientific education possessed by
the managers of our mines, and pointed out some of the blunders following in conse-
quence of such a state of things, and by way of comparison made a few remarks on the
superior qualifications of the French School of Mines, in order to show that whilst our
miners have a large amount of practical knowledge, and the best concerted work,
information to render their practical ideas of universal application, the French, as
rule, were experimental theorists, instead of practical miners; and as a remedy urged
more extensive course of study, which should embrace both the theory, science, and
practice of mining; at the same time observing that such a course of study was likely
to be pursued at the School of Mining just established in Cornwall, and calling upon
that portion of the public who have capital invested in mining property to give such
an institution their earnest support, with a view of ultimately demanding from can-
didates for responsible mining appointments certificates of competency for the dis-
charge of their respective duties. Having enlarged on a variety of evils arising from
a deficient scientific education, when united with a highly speculative turn of mind,
I proceeded to a critical consideration of the peculiarities of the Cost-book System,
exhibiting, as familiarly as I could, its salient points of excellence, noticing incidentally
the causes which have tended materially to vitiate this primitive system of gov-
ernment, and specifying as particularly objectionable pursuers being either share-
holders or dealers in shares, sharebrokers or dealers being managers of mines, and
entirely or in part the complete right of the adventurer to the absolute control over
the whole of their affairs at the ordinary general meetings, and exhibiting the same
as, for forcibly as I could, very cogent reasons why the Cost-book System should be
carried out in its integrity. Of my own order I have hitherto said nothing, partly
because my observations would be necessarily retrospective, and partly because an
exposé of the petty jealousies of a number of men gathered from all classes of the min-
ing community would neither be interesting nor instructive. The public, as individ-
uals, must be the best judges of the character of their agents, and it would, therefore,
be inadvisable to make any remarks which might reflect on the mining share dealers and
sharebrokers have been quite unguarded; into it any person might enter without enquiry or
comment, and without any kind of rule or restraint, except the good or bad opinion
of the members individually; and it is not, therefore, a matter of surprise that abuses
have crept in, and that practices abound which are repugnant to the feelings of every
honourable man, and tend to bring mining men, as a body, into disrepute with the
public. An attempt is being made to remedy this state of things by the establish-
ment of a Mining Exchange, where there will be some check exercised as to the ad-
mission of producers and consumers, and the mining property to be more expeditiously and safely trans-
acted. This scheme will, no doubt, answer well, provided that a system of oligarchical
government be not introduced, and the proper liberty of the majority of the shareholders
not unduly or inquisitorially interfered with by a dominant minority. I say it will
work well if these things be avoided. Past experience teaches me that the managing
committee will have a most difficult part to play, requiring the exercise of rare discre-
tion and eminent forbearance. I shall watch the early career of this institution with a
jealous eye, and will criticise its short-comings, *pro bona publico*, with a ready pen.
In conclusion, let me urge on the mining public the necessity of vigilance and prudent
management, and let them beware of allowing their property to be so exaggerated report
or sounding title induce them to invest their capital without due examination and
for my part I unhesitatingly promise to expose abuses as they may arise. If in the
course of my remarks on this subject, it should be thought that I have been at any
time unnecessarily severe, I can only plead its importance as my complete justification."

GEOLOGICAL MAP.—M. Dumont, the celebrated geologist, has lately
completed a geological map of Europe for the Paris Exhibition. Maps of this nature
have previously appeared, but of a special and limited character; but M. Dumont
taking advantage of the numerous documents with which he has been readily fur-
nished by the scientific world in general, has succeeded in completing a work de-
signed to be of the utmost importance in the classification of the various compositions
which form the soil of Europe. M. Dumont has also placed at the disposal of the
reading a map, to be published by Government, showing the subsoil of this country.
The former map, with the accompanying explanatory text, is a work of great value,
and is destined to reveal what lies below the more recent deposits, thus afford-
ing valuable indications in the research of minerals or building materials, as also to
agriculturists. A map of the environs of Spa, Thaux, and Pepinster, has also been
laid down by the same eminent geologist, whose various works cannot fail to con-
duce as well to his own reputation as to the honour of the University of Liege.

M. AME TUSAUD'S EXHIBITION.—This exhibition has, since the holi-
days, been constantly crowded, to view the numerous interesting groups and figures
of distinguished individuals, and among the latest additions which appear to attract
the chief attention of the visitors is the Emperor and Empress of Austria, and His
Royal Highness the Duke of Cambridge, the former being, perhaps, the most elegant
and life-like figures in the exhibition. We understand there are several interesting
models in progress.

MINES AND MINING—No. XV.
BY EVAN HOPKINS, C.E., F.G.S.

[FROM A CORRESPONDENT.]

✕ **LAKE SUPERIOR.**—The ship canal at Saut St. Marie, connecting the lakes Huron and Superior, was opened for traffic on the 18th of May, having been rather less than two years in completion. This event will form an era in the history of mining on the shores of Lake Superior, one great drawback to which has been the exorbitant high rate of freights, which, but for the unusual richness of the copper ores and native copper, raised most have put a stop to operations. The first great advantage of the opening of this canal will be a very great reduction in this item of cost, and materials, provisions, and machinery will now be obtained from Detroit and the lower lakes at moderate and reasonable freights. Ontonagon will probably be the principal town on the lake, situated as it is at the mouth of a tolerably large river bearing the same name, with a natural harbour, and which could be greatly improved by a new pier and breakwater. A plank road has already been contracted for to the mines, six miles of which have been completed, which will greatly facilitate the carriage of stores and mineral produce. A fine hotel, containing 70 rooms, has been erected; the population of the district is computed at 15,000, which is daily augmenting. The lake abounds with the finest fish, and the climate healthy and invigorating. The most successful mine adventures are the Cliff, Minnesota, North American, Copper Falls, National, Norwich, Ohio Trap Rock, Toito, Douglas, Houghton, Forest, and some others.

METAL MARKET, London, June 23, 1855.

has been met with to the adit. South Frances shares have been flatter, and offering at 500*l.* to 505*l.*; Bullers in demand, at 500*l.* to 510*l.*; North Basset, 28*l.* to 28*l.* 10*s.*; West Basset, 31*l.*; West Frances in good demand, at 23*l.* to 25*l.*, but shares very scarce and difficult to get, though it was anticipated the call of 3*l.* per share would bring a few to market. This interest is still attached to the prospects of this mine, as well as East Basset, where shares are also in request at 50*l.* Rosewarne, 210*l.*; Clijah and Wentworth have been largely dealt in at 17*l.*, 17*l.* 10*s.*, 18*l.*, 19*l.* 10*s.*, 20*l.* 10*s.*, with a good demand; Marke Valley, 5*l.* 2*s.* 6*d.* to 5*l.* 7*s.* 6*d.*, and a large business done; East Gunnis Lake, 3*l.* to 3*l.* 2*s.* 6*d.*; Wheal Kitty have declined, owing to many parties who purchased low having been realising their profits, 55*l.* to 60*l.*; Gambler and St. Aubyn, 30*l.*; North Darren, 7*s.* 6*d.* to 10*s.*; North Towy, 7*s.* 6*d.* to 10*s.*; Alfred Towy, 1*l.* 5*s.* to 1*l.* 7*s.* 6*d.*; Wheal Edward, 3*l.* 5*s.* to 3*l.* 10*s.*; Alfred Consols, 2*l.* to 12*l.* 10*s.*; North Wheal Unity, 15*s.* to 1*l.*—this mine, with a balance of nearly 2000*l.* in hand, is making fair returns, and likely, from present appearances, to pay profits this year. It is between Tremayne and Rosewarne, adjoining the eastern boundary of the former, and having its principal copper lode. All the machinery is perfect, and the shaft down 8 fms. below the 46. Being in few hands, however, the mine has been brought little before the public, though Rosewarne is now directing more attention to the district. A rich tin lode, it is reported, has been cut in Tretoil, not far from the boundary of Wheal Messer, and running through the latter sett. Gonamena, 24*l.* to 25*l.*; Wheal Wrey, 5*l.* 2*s.* 6*d.* to 5*l.* 7*s.* 6*d.*; Condurrow, 105*l.* to 110*l.*; South Cargoll, 25*l.* We hear there is a further improvement in Basset, and South Frances is looking better in the 104 fathom level west. Sortridge Consols, 2*l.* 17*s.* 6*d.* to 2*l.* 2*s.* 6*d.*; Tamar Consols, 2*l.*; Bell and Lanarth enquired for, at 2*l.*

Great Sortridge, Great Wheel Martha, Nant-ar-Nelle, North Hingston, Quintrell Downs, South Devon Consols, South Buller and West Penstruthal, Maria, Tremollet Down, Wheel Edward, Wheel Hender, Wheel Ludecott, Claw

In Foreign Mines, prices have ruled a shade lower. St. John del Rey, on Tuesday, were dealt in at 29½ to 29¾, ex div.; on Wednesday, 28 to 30; on Thursday, they were flat, at 28, but slightly rallied yesterday, changing hands at 28 to 29, ex div. Cobalt Copper were firmer, business being done at 69; Fortuna, 1½ to 1½; Llaneros, 7½; National Brazilian, 2½ to 3½; Clarendon of Jamaica, ½ to ½ pm; Copal, 20 to 22; Lusitania, ½ to ½; Pontgibaud Silver-Lead Mining and Smelting Company, 16 to 17; Royal Santiago, 5½ to 6½. The following quotations are merely nominal—Culicote Copper, 1-16th to 3-16th per share; Jamaica Copper, ½ to ½ per share; Oshornoff, 1-16th to 3-16th per share; Peninsular Mining Company, ½ to ½ pm; San Fernando, 3-16th to ½ per share; Port Royal (of Jamaica), ½ to ½ per share; Wildberg Consols, 1½ to 2 per share.

At the Mariquita and New Granada Mining Company extraordinary general meeting, held yesterday, at the London Tavern (Mr. J. D. Poles in the chair), for the purpose of considering the propriety of making certain alterations in the Deed of Settlement, resolutions, in conformity with announcement, were submitted. The first resolution—That in future ordinary general meetings may be held half-yearly—was unanimously carried; the second—That any number of shareholders representing at a meeting 30,000 shares shall be deemed sufficient to constitute a meeting—was strongly opposed by Mr. Richardson and Mr. Keate, on the ground that it would place all the power in the hands of the directors, who were large shareholders, and could at any time swamp such a number as the resolution proposed. The former gentleman proposed an amendment, and in so doing indulged in personalities with reference to the Chairman and directors, which led to considerable confusion, and for a time impeded the progress of the proceedings. The Chairman denied that the passing of the resolution proposed would be of the slightest advantage to the directors, and urged that it was for the interest of the shareholders that it was submitted; for, as the company was at present constituted, there must be two-thirds of the shareholders present, and it was extremely difficult to get so large a number together, and unless they could get that number together, as the clause in the Deed of Settlement at present stood, they could do nothing. There was no object to be attained except to facilitate the business for which they called their meetings; there was no restriction on the rights and privileges of shareholders, but, on the contrary, he had just shown, was for their advantage. A resolution as to the number of votes given by each shareholder in respect of the number of shares held by him was discussed at some length. Mr. Herpath suggested that shareholders be entitled to vote for every share they held up to 500, and beyond that number should have one vote for every 500. The resolution proposed by the directors gave one vote for every five after 500. Mr. Herpath at once gave way. The board of directors was reduced; the number which it will for the future consist of being not less than five or more than eight. It was resolved that two auditors be elected annually at the general meeting. A ballot was then commenced upon Mr. Richardson's amendment, which will be continued on Monday and Tuesday, at the offices of the company, Bank-buildings, and the meeting separated.

At the Mount Carbon Mining Company meeting, yesterday (Mr. Gerald Balston in the chair), a report was read, from an eminent American engineer, detailing the progress made by the company, and strongly recommending additional funds should be raised for the active development of the works. It was ultimately resolved that the directors should be authorised to increase the issue of bonds to the amount of £15,000, to be secured by mortgage on the whole of the property. Full particulars of the meeting will be found in another column.

At the Anglo-Californian Gold Mining Company extraordinary general meeting, on Wednesday (Mr. G. E. Cottrell in the chair), it was resolved that the directors should be authorised to raise the sum of £6000, by loan, preference shares, or any other way they might think desirable. The annual remuneration of the directors was maintained at £1500, to £2000. A resolution was passed authorising the directors to appoint a committee of shareholders to act with them during the present emergency. The amount of quartz crushed has been 320 tons, the value in money of which was £1600, the average per ton being 5s. 6d. A large quantity crushed in 24 hours was 30½ tons, and the profits to be realised therefrom at the rate of 1s. 10s. per ton.

At the L'Aigle d'Or Mining Company meeting, at Paris, on the 9th inst. (the Marquis de Clapiers in the chair), the accounts showed a balance in favour of the company of 107,175. It having been found impossible to sell or negotiate the shares on hand, and the present shareholders refusing to subscribe the additional capital required, a resolution was passed for winding-up the affairs of the company forthwith. The proceedings are reported in another column.

The Mariquita Company have received despatches, of which the following is an abstract:—SANTA ANA MINES for the month of April: Cost, \$5525; returns, \$12,016; estimated value of ore stamped, dressed, &c., but not reduced, from the amalgamation works being still out of order, \$4212, making a total of \$16,228.—MARAYO MINES for the month of March: Cost, \$13,342; returns, \$12,366.—PURIMA MINES for the month of March: Cost, \$4259; returns, \$2295.

The Imperial Brazilian Mining Association have advised to April 30. The reports are of a very favourable character, the produce being much greater, and obtained at much less expenditure. Joinville's adit is progressing very rapidly, being now in about 144 fms., 30 fms. 2 ft. of which were driven during the month of April. The produce of gold for the month of April was 7 lbs. 8 ozs. 9 dwts. The association has received a remittance of gold dust, amounting to 17 lbs. 10 ozs. 9 dwts.

The National Brazilian Mining Association did not receive despatches by the Great Western steam packet, but we understand that Mr. Oxenford arrived at Rio de Janeiro safe and well, on the 10th May last, and proposed leaving on the 14th for the mines.

The St. John del Rey Mining Company have advised from Morro Velho to April 30.—Gold extracted to date 17,134 ottavas, from 1207½ cubic feet of sand (result of 20 days' stamping), yielding 14,199 ottas. per cubic foot, and of 4752½ tons of stone, equal to 3-60 ottas. per ton. Stamps working during the 20 days, average 150-81 heads; with 132 heads, 19-22 days. The supply of stone from the mine has allowed us to throw out some of the quite worthless, and without taking in any from the old refuse heap. The quality has continued poor on the average, as although the Cachoeira maintains its fine state, the Batu stone is not so good. At the Champlain adit it is almost entirely killed. The mine agents continue of opinion that there are good grounds for expecting a further improvement in the Cachoeira as it gets down to the same horizon at which the stone in the Batu was so good.

The Llaneros Mining Company have advised, dated Pozo Ancho, June 9: At the engine-shaft, the lode has been cut through in the 85, and the men are put to drive west; the lode is large, containing spots of lead ore, but not to value. The 75 is driven west of engine-shaft 73 varas; the lode is poor. The rise in the back of this level, to communicate with Lopez winze, is up 8 varas, the lode producing 3 tons of ore per fathom. The 65 is in advance of Romero's winze 15 varas 0 ft. 6 in.; this level is communicated to San Juan shaft. The 15, west of San Francisco, on north lode, is poor. In the 15, east of Victoria, the lode is small, worth ½ ton per fathom.—East of Engine-shaft: The 75 is beyond Buendias winze 33 varas 2 feet, the lode good, and worth 2 tons of ore per fathom. The 65, east of Cortez winze, is bad to Shaw's shaft, and the men are engaged cutting pit. Manuel's winze is sunk below this level 9 varas 1 ft. 6 in., the lode worth 3 tons of ore per fathom. At Thorne's shaft, the 55 is driven east of Esteban's winze 11 varas 2 ft., the lode worth 3 tons of ore per fathom. The 55, on north lode, is east of cross-cut 11 varas 2 ft. 6 in., the lode worth 1 ton per fathom. The 45 is east of Companys winze 48 varas 1 ft., the lode poor, and the men put to drive the cross-cut north towards Alexandros winze. The 45, on north lode, is east of Galeros winze 21 varas 2 ft. 6 in.; the lode has improved, being worth 4 tons of ore per fathom. Gas winze, on this lode, is sunk below the level 9 varas 1 foot, the lode worth 2½ tons per fathom. The end on middle lode is driven east of cross-cut 57 varas, the lode not to value. The 45, on north lode, is driven west of cross-cut 30 varas, the lode worth 2 tons of ore per fathom. San Martin's winze, on the middle lode, is sunk below the 31 ft. level 20 varas 2 ft., the lode worth ½ ton per fathom. The 20, at Thorne's shaft, is east of No. 2 winze 16 varas 2 ft. 6 in., the lode worth 1 ton of ore per fathom. Taylor's shaft is sunk below the 31 ft. level 6 varas 0 ft. 6 in., the lode large, producing 3 tons of ore per fathom. The end on north lode is east of shaft 63 varas, the lode worth 1½ ton of ore per fathom. The end on south lode is east of Taylor's cross-cut 31 varas 2 ft. 6 in., the lode worth 1½ ton per fathom. The lode is down to the depth of the 45, and the men are put to drive south towards a cross-cut driving to meet them from the south lode. The tribute department is looking moderately well. The raisings for May are about 205 tons, and our calculation for June is 225 tons. We have 28 pitches in work, employing, with the pitwork, 150 men.

The Pontgibaud Mining Company have received a report from Captain Rickard, dated the 18th inst., from which the following is extracted:—At FRANK, the winze sinking in the bottom of the adit level, at Challard, is still in good ground, and quite dry; we estimate the lode worth ½ ton of ore per fathom. The adit level, north of cross-cut on St. Felix lode, is looking promising, and turning out ½ ton of ore per fathom. We have one tribute pitch working over this level, at 75 francs per ton of ore of 50 per cent. The men in the rise against Challard's shaft are getting up well; the lode is about 3 ft. wide, and producing some good ore. The railroad from Frank to Barbacoe will be completed next week, when we shall be in a good position to take the ore to the crusher.—At BARCOT, the adit level south of cross-cut, on No. 1 lode, is still looking kindly; the pitch over this level is still looking well, and yielding rich lead ore. The adit north and south on No. 3 lode is looking well, and laying open good tribute ground. We are now about to lay a railroad in this level, and when this is done we shall increase our returns here by setting more tribute pitches.—At BARCOT, the 20 metre level, north of Leontine's shaft, is looking very promising, and yielding more ore, and we are under great expectations of cutting a good bunch of ore.—At MIOCHE, the 20 metre level cross-cut, east and west of Taylor's shaft, are driving rapidly through a good channel of ground, and already some good veins of ore have been cut that look well for the lode. Our surface stopes are still looking as good as ever, but we have lessened our hands there for the present.—At ROSKES, the rise in the back of the 45 metre level, north of John's engine-shaft, still looks well, and is turning out upwards of 2 tons of ore per fathom. We intend to make this rise 20 metres high, and then start a 25 metre level north and south from it, instead of driving from a cross-cut from John's shaft. The lode in the 60 metre level is still kindly, and yielding 1½ ton of ore per fathom; this lode is standing west of the old level, and by undercutting it we are laying open a fine piece of ore ground. We have this month begun a level between the 85 and 60 from a winze north of St. Joseph's shaft; the ground being good driving, and not having any ore in the 85, we began this as a trial, and have now a lode that will produce 1½ ton of ore per fathom; we think this will lead us to some discoveries in the bottom level, as we think this is another part of the lode from the one driving upon in the level below. The lode in the end of the 85 is of a promising character, and producing 1 ton of ore per fathom. The adit south of St. Peter's is still in a good lode, yielding 2½ tons of ore per fathom. The stopes and tribute pitches throughout the mines are yielding quite to expectation, and giving good returns. We have weighed nearly all our May ore, and find ourselves quite safe in saying we shall not be under 140 tons. We have a good supply of labourers in all our mines, underground and at surface, and in the dressing department, and every thing is going on well. The first annual general meeting will take place at Paris, on the 26th inst.

The San Fernando Mining and Smelting Company have received their monthly report:—At SAN FERNANDO, the 100 vara level has been driven west during the past month 3 varas 0 feet 3 inches, and is re-set to six men at 500 reals per vara, worth 6 reals per lode per fathom. The 100 vara level has been driven 2 varas 0 feet 9 inches; re-set to four men, at 600 reals per vara—lode poor. The 80 vara level has been driven east 3 varas 1 foot; re-set to four men, at 500 reals per vara, worth full 3 tons of lead ore per fathom; the 80 vara level west has been extended 4 varas 2 ft. 2 in.; re-set to four men, at 350 reals per vara, worth about 1 ton in a fathom. The 60 vara level has been driven east 3 varas 0 ft. 8 in.; re-set to four men, at 400 reals per vara—lode producing occasional stoves of lead ore.—At SAN ANTONIO, the 80 vara level has been driven east 3 varas 1 foot; re-set to four men, at 400 reals per vara—lode wide and promising, yielding good stoves of lead ore; this level has been extended west 2 varas 1 ft. 1 inch; re-set to four men, at 400 reals per vara—the lode in this level is also wide, and producing stoves of lead ore. The winze under the 60 vara level, east from shaft, has been sunk 3 varas 1 ft. 6 in.; re-set to

four men, at 200 reals per vara, and 1 real per arroba for rock ore, worth 4 tons of lead ore per fathom. The 50 vara level has been driven west from Santa Isabella shaft 4 varas 2 feet 6 inches; re-set to four men, at 150 reals per vara—lode not to value. The stopes and pitches are yielding about the usual quantity of lead ore. Ore weighed in for May, 17,633 arrobas, or 300 tons and 33 arrobas. We calculate about the same quantity for June.—JONAS REMFERY; J. G. REMFERY.

The following letter has also been received by the London agent from the grant of the company residing in Spain, dated Madrid, the 16th inst.:—The rich bunch has varied much during the last month; but Mr. Josiah Remfery writes me to-day, saying, "It looked gloomy a few days ago, but the last day or two an improvement has taken place, by the granite diminishing and good ore taking its place; should the end continue as it now is, we shall have no reason to complain." He adds, "The 80 east of San Enrique, and the winze under the 60 east of Abandona shaft, as you will see by the report, are very much improved."

The Lusitania Mining Company have advised from Captain Thomas Chepwin, their mining agent at Falhal Mine, Portugal, dated 7th inst., of which the following are extracts:—FALHAL: The lode in Taylor's engine-shaft, sinking below the 8 ft. level, is 2 ft. wide, producing 2 tons per fathom for the length of the shaft; the ground is more favourable for sinking than it has been, but the water is increasing. The lode in the 8, east of Taylor's engine-shaft, has not been taken down for the last fortnight, but I think there is a good one standing, which will be taken down next week. The lode in the 8, west of Kioy's winze, on the north part, is small and poor, and at present abandoned. We are now driving on the south part, which is 6 inches wide, composed of quartz and elvan. The lode in the stope No. 1, west of Kioy's winze, is small and poor, but about 2 fms. further west it is worth 1½ ton per fathom. The men were this week engaged in putting in a stull in the back of the level, which is finished to day; after which they will resume the stoping from the end of the said winze, where the lode is worth 2 tons per fathom. The lode in stope No. 2, west of Taylor's engine-shaft, is worth 2 tons per fathom. The lode in the adit level in the eastern hill is 3 ft. wide, composed of quartz, and on the south wall there is a small branch of good black copper ore, worth 1 ton per fathom. The lode in the 8, west of Antonio's winze, on the Mill lode, is 6 in. wide, but nothing to value. We shall begin to stop the back of this level, on the north part, next week, where the lode is 6 in. wide, worth 1 ton per fathom.—HOUSE LODE: We have drained all the water from the old workings with a pump and tackle down to the stuff, which was full of rubbish to within 2 fms. of the top; the depth of the shaft is unknown. As to the value of the lode I cannot give you any information as yet, but from the stoves found in the rubbish there must have been silver-lead raised here. There is an adit level driven east from the old shaft 6 fathoms on the course of the lode, which is 2½ ft. wide, and from which I have broken some small stoves of black copper ore, mixed with lead. We intend to clear out these old workings as fast as we can, to see what is there. We have now at Aveiro about 90 tons of copper ore, of quality No. 2, as per samples last sent, as a cargo for the *Ellen* when she comes, and if she only takes about 65 tons there will be left about 25 towards another cargo for her, which we hope to complete by the time she returns. Calculations for the raisings in May is about 30 tons. We have at surface dressed and undressed at the mine about 70 tons.—[The samples of copper ore alluded to have not yet come to hand.]

The Wildberg Great Consolidated Mining Company have received their report, dated Wildberg, June 14:—At WEST MINES, the lode in the Blumengang sink will produce 5½ tons of silver-lead ore per fathom. No. 3, bottom stope, will produce 2 tons of silver-lead ore per fathom. Beck's lode, driving east from the south cross-cut, will produce 1½ ton of silver-lead ore per fathom. We have commenced a new sink in the bottom of Beck's lode, east from the south cross-cut, and I am glad to say the lode somewhat exceeds my anticipation; it will produce from 5 to 6 tons of silver-lead ore per fathom. Dean's winze, sinking below the 20 ft. level, west from Michael's shaft, will produce 1 ton of silver-lead ore per fathom. Dean's stope, in the back of the 20 ft. level, east from Michael's shaft, will turn out 2½ tons of silver-lead ore per fathom. The winning stope, in the Westwinze winze, east of Michael's shaft, will produce 1 ton of silver-lead ore per fathom. The Dornengang stope, in the bottom of the 15 ft. level, east of Michael's shaft, will produce 1½ ton of silver-lead ore per fathom. Carter's engine-shaft is set to sink under the 40 ft. level, to twelve men, 3 lachters *cartum*, equal to 3 fms. 2 ft., at 160 l. per lachter, and I feel pleasure in stating that the branches of lead in the bottom of the shaft will almost pay for sinking. Our surface works throughout are progressing well.—JAMES M. CHAMPION.

At Kinzigthal Mine, the barytes mill and smelting works are now in full operation, and favourable accounts have been received as to the general appearance of the mine.

The arrivals at Swansea include—from Havannah, 547 tons of copper ore; from Caldera, 330 tons of copper regulus, and 394 tons of silver ore; from Cuba, 550 tons of copper ore.

In Iron and Coal Companies, during the week, there has been but very little doing. The closing prices are—Blaenavon Iron and Coal, 5 to 7; British Iron, 5 to 6; Rhymney Iron, 10 to 11; ditto New, 5 to 6; Duston Iron Ore, ½ to ¾; and Portland Iron, 1½ to 1¾.

The Gold Mining Share Market continues neglected, the only transaction effected yesterday was in Nouveau Mondes, at ½. The closing price of Agua Fria was ¼ to ½; Anglo-Californian, ¼ to ½; Carson's Creek, ¼ to ½; Colonial Gold, ¼ to ½; Great Nugget vein, registered, ¼ to ½; Port Phillip, ¼ to ½; Quartz, 100 to 120; ditto, 100 to 120; ditto, 100 to 120. The following quotations are merely nominal—British Australian Gold, 1-16th to ½; Lake Bathurst Gold, 1s. to 2s. per share; London and Virginia Gold and Copper, 3-16ths to 5-16ths per share; L'Aigle d'Or, 1-16th to 3-16th per share.

In Miscellaneous Shares, the market has been quiet throughout the week, but prices have remained without material alteration. Oriental Gas shares were dealt in yesterday at ½ pm., and a small amount of business was transacted in the following:—Australian Agricultural, 31 to 31½; Peel River, 2½; Scottish Australian Investment, new, ½; Australian Royal Mail, 4½; Crystal Palace, 3 to 3½; ditto, Preference, 5½; General Screw Steam Shipping Company, 15½ to 15½. The closing price of Berlin Water-Works was 2½ to 3; British American Land, 57 to 60; Canada, 119 to 121; Electric Telegraph, 17 to 18; Mexican and South American, 6½ to 6½, ex div.; Netherlands Land, 1½ to 2½; North British Australasian, ½ to 1; Royal Mail Steam, 72 to 74; Scottish Australian Investment, 1½ to 2; South Australian Land, 38 to 39; Submarine Telegraph, scrip, 38 to 39; ditto, registered, 3 to 1; Van Diemen's Land, 13 to 13½. In Joint-Stock Banks, a very fair amount of business was transacted yesterday, shares changing hands in Australia at 85 to 84½; British North American, 66, ex div. and bonus; City, 35½; English, Scottish, and Australian Chartered, 18½ to 18½; London, 32½ to 33; London Chartered Bank of Australia, 20½; National Provincial of England, new, 22; Oriental Bank Corporation, 38½ to 3½; Provincial of Ireland, 53. In other securities of this description the closing quotations were—Chartered Bank of Asia, ½ dis. to par; New South Wales, 3s. to 3½; South Australia, 42 to 44; Union of Australia, 74 to 75; ditto, New, 8 to 9.

Dr. Collyer has appointed the well-known firm of Ransomes and Sims, of Ipswich, sole manufacturers in England of his patent machinery; and it will be seen by our advertising columns that an important reduction has been made in the various prices. As the crusher is adapted for operating upon tin ores, it is now expected to meet with a considerable demand. Such a machine can be supplied for the large machine for 200 l., and for the small one at 100 l., each, which are calculated to crush at least 1000 tons.

At the Royal Exchange Fire, Life, and Marine Assurance Company meeting, on Thursday, a dividend of 3 per cent. for the half-year was declared, with a bonus, for the 5th of 5 per cent. Total dividend paid in January, of 3 per cent. for the half-year, makes a total of 11 per cent. for the year. The business of the fire department of the company appears, from what transpired, to have been particularly beneficial to the interest of the company.

At the South Australian Banking Company meeting, on Tuesday (Mr. E. Divett in the chair), the accounts showed a balance in favour of the proprietors of 45,312 l. 18s. 2d. A dividend at the rate of 14 per cent. per annum, free of income tax, was declared. The proceedings, which are fully reported in another column, terminated with votes of thanks to the directors and Mr. Purdy, the manager.

The Oriental Gas Company have convened an extraordinary general meeting, for Monday, the 2d of July, for the purpose of raising additional capital to extend the operations of the company to Madras, Bombay, and other places. It will be proposed to increase the capital to 100,000 l., by the creation of 50,000 new shares, of 1 l. each, to be issued *pro rata* to the present shareholders.

In the House of Commons, last night, the Coal Mines Inspection Bill was postponed until Thursday; and Mr. Horsfall gave notice, that on the second reading of the Limited Liability and Partnership Amendment Bills, he should move that they be referred to a select committee.

The Birch Tor and Vifiter Mining Company winding-up will be proceeded with on July 17, when Sir W. Page Wood will settle the list of contributors. Mr. R. P. Harding has been appointed official manager of the Great Cambrian Mining and Quarrying Company, and of the Eastern Counties Junction and Southend Railway Company.

The London Mercantile Life Assurance Company's affairs will be proceeded with on July 18; and the Pantagraphic Cutting, Carving, and Engraving Company on July 3.

SALE OF MINING SHARES BY AUCTION.—At Mr. T. P. Thomas's sale, at Garraway's, on Tuesday, the prices realised were—568 Drake Walls (subject to the call of 4s. per share), 6d.; 50 Garraway's, 7s. 4d.; 40 Whitford, 2s.; 30 Kilbricken, 5s. 6d.; 60 Moatyn, 2s. 6d. The following shares were offered, but found no bidders:—100 Cubert United, 200 Tassan, 2 Wheel Level, 100 North Towy, 300 Mizen Head.

At Mr. John R. Pike's sale, at Garraway's, on Wednesday, the prices realised were:—1 Buller, 445 l.; 125 Tincroft, 1 l. 5s.; 125 Great Onslow Consols, 7s.; 50 Penquern Slate, 6s., and 69 s. 4d.; 6 Eaglebrook, 19 l.; 45 Treleigh Consols, 15s.; 61 Penryn Consols, 5s.; 100 Leeds Town, 1 l.; 2 Forest, 3 s.; 50 Buller and Basset, 4s. 5s., and 100 4 l.; 14 Bell and Lanarth, 1 l.; 1 Wheel Level, 157 l.; 30 North Franch, 2 l. 10s.; 60 St. Day United, 2 l.; 10 Carvannell, 2 l. 15s.; 1 Union, 2 l. 10s.; 5 North Buller, 3 l. 7s. 6d., and 32 l. 5s.; 1 Wheel Margaret, 100 l.; 1 West Caradon, 162 l. 10s.; 100 South Buller and West Penstruth, 2 l. 12s. 6d.; 100 l. West Wheel Vor, 6s.; 2 Nant-ar-Nelle, 9 l. and 9 l. 5s.; 2 Trevelyan, 22 l. and 22 l. 1s.; 1 Rosewarne, 210 l.; 1 South Frances, 525 l.; 2 Boscan, 50 l.; 25 Great Wheel Radern, 12s. 6d.; 5 West Basset, 30 l. 10s.; 50 Mendip Hills, 2 l.; 30 Great Wheel Vor, 11s. Bought in—1 Brynford Hall, 35 l.; 35 Nantoes and Penrhwi, 1 l. 4s.; 1 Wheel Cliffe, the highest being 1-0 l. The following shares were also offered, but there was no bidding:—30 Sibley Wheel Buller, 5 Mount's Bay, 100 Great Wheel Martha, and 10 South Providence.

EXPORT OF COAL.—As stated in the *Mining Journal* of June 2, during the month of April the total amount sent out from the English, Welsh, and Scotch ports was 337,158 tons. Of this aggregate Liverpool contributed 37,908 tons; the northern ports, including Newcastle, Shields, Elth, Amble, Sutherland, Durham, Hartlepool, Stockton, and Middlesbrough, 214,262 tons; the Severn ports, including Bristol, Cardiff, Swansea, Newport, Llanelli, Port Talbot, and Neath, 73,673 tons; the Scotch ports, including Glasgow, Port Glasgow, Grangemouth, Alloa, Borrow Stoney, Troon, Ardrossan, and Inverkeithing, 22,112 tons; and the Yorkshire ports, including Hull, Grimsby, and Goole, 3203 tons. Of the countries which have absorbed this vast quantity of fuel France stands at the head, the total amount sent there being 68,112 tons. Germany stands next, the amount being 49,475 tons. The Mediterranean is next, the amount being 37,814 tons, and that of Turkey 37,814 tons. The world's various amounts under 20,000 tons. It is a serious question how long Great Britain can stand this immense drain of "treasure," but at present there are no signs of its diminution, while the adoption of steam navigation spreads so rapidly in every quarter of the globe.—W. and H. LAIRD: Liverpool.

Our correspondent, Mr. Thomas Atkins, C.E., of Oxford, introduces his Educational Panorama of Creation, Science and Civilisation, at St. Martin's Hall, London, on Monday. We understand the exhibition is likely to prove highly attractive—the panorama being well painted, comprehensive in its objects, and calculated greatly to improve our present system of education.

CORNISH ENGINES.—The number of pumping engines reported by Mr. Thomas Lean in May month was 19. They have consumed 1445 tons of coal, and lifted 11,000,000 tons of water 10 fms. high. The average duty of the whole is, therefore, 46,000,000 lbs. lifted 1 ft. high, by the consumption of a bushel of coal weighing 54 lbs. The average duty was exceeded by the engines at Great Work, West Providence, Wheel Tremayne, North Roskear, East Pool, and East Wheel Rose.

HULL, June 31.—Our correspondents (Messrs. T. W. Flint and Co.) state that mining shares are still without activity, and the business doing in them is very trifling. Our market for railway shares continues steadily supported, and very little stock is brought for sale; speculation, however, is languid, and the demand being chiefly for investment, prices have not advanced as they otherwise would. Hull and Selby are in request, and have been dealt in to some extent.

* * We have been compelled to postpone Mr. Sanderson's paper on the Manufacture of Steel; also, reports of the South Australian Banking Company; the South Australian Company; and the Bank of Australasia.

MR. JOHN BURGESS has been instructed to OFFER FOR SALE, BY PUBLIC AUCTION, all the ENGINES and MATERIALS on WHEEL GOLDEN, in the parish of Ferranabulo, a convenient situation for shipping, being only three miles from the Gannel, and seven from New Quay and St. Agnes. 1 50 in. cylinder PUMPING ENGINE, with 30 tons boilers. 1 10 in. engine and crusher, with boilers 10 tons. 1 10 in. engine, with boilers 7 tons. 120 fms. 13 in., pumps; several fms. 9 in., 11 in., 12 in., and 7 in. pumps. 700 fms. railroad iron; water-wheel and stamps; hydraulic engine; and sundry other materials. A detailed account will be given next week. Dated Barnose, Redruth, June 14, 1855.

MINING MACHINERY AND MATERIALS FOR SALE. MR. JAMES PERMEWILL WILL SELL, BY AUCTION (unless the whole, or any part, be disposed of by private contract, of which due notice will be given), on Monday, the 9th of July next, at Eleven in the forenoon, at EAST DING DONG MINE, in the parish of Madron, 2½ miles from Penzance, the following valuable MINE MATERIALS, &c.:—viz., a 24 in. cylinder PUMPING ENGINE, 9 ft. stroke in the cylinder, and 8 ft. in the shaft, with boiler weighing about 8 tons, all new within two years; a capstan; 3 balance-bobs, complete; 2 8 in. cinck steel-pieces; 8 in. windbars; 12 fms. of 8 in. pumps; 5 in. working-barrel; 6 in. windbars; 5 in. cinck steel-piece; 2 horse-shims; 60 fms. ¼ in. whim-chain; 4 8 in. bucket prongs; 4 5 in. ditto; 20 fms. of ladders; 100 fms. air-pipes; 120 fms. ladders; a quantity of new and old timber; smiths' bellows; anvil; smiths and miners' tools; new and old iron; miners and other chests; new and old rope, &c. Also, the account-house furniture; and numerous other articles. For viewing, apply to the agent on the mine; and for other particulars, to the auctioneer, at his Mining Office, Penzance.—Dated June 18, 1855.

GREAT CRINNIS MINING COMPANY.—Notice is hereby given, THAT the ADJOURNED GENERAL MEETING of the shareholders will be HELD at the offices of the company, 47, Old Broad-street, on Tuesday, the 3d July next, 7 P.M. precisely. By order of the Board, R. C. MANUEL, Sec.

LEAD ORES.				
Mines.	Tons.	Price per ton.	Purchasers.	
Frongoch	100	£13 18 0	Panther Smelting Co.	
Cefn Brynno	100	£14 6 0	ditto	
Sold on the 10th June.				
Esgrir Mwyn	35	£13 13 0	Walker, Parker, & Co.	
Sold on the 21st June.				
Tamar	65	£19 3 0	Sims, Williams, & Co.	
Sold on the Mine.				
Loveden United	20	£16 16 0	Walker, Parker, & Co.	
Ivybridge	16½	£14 14 0	—	
ditto	5½	£14 14 0	—	

BLACK TIN.				
Mines.	Tons c. q. lb.	Price per ton.	Amount.	Purchasers.
Mill Pool	4 6 3 19	£51 5 0	£266 3 6	Chandour.
Sold on the 15th June.				
St. Dennis Consols	2 6 0 16	£54 7 0	£148 10 5	New Blowing.
ditto	0 3 2 22	50 7 6	8 14 11	ditto
ditto	0 3 2 23	50 0 0	9 5 3	ditto
Sold on the 19th June.				
Great Polgoth	11 10 3 26	£—	£—	—
Sold on the 20th June.				
Wheal Sidney	7 18 1 7	£55 2 0	£515 10 1	Enthoven.
ditto	0 4 3 24	55 0 0	13 13 0	ditto
Sold on the Mine.				
West Polberro	0 8 1 12	£50 0 0	£20 17 10	Calenick.
ditto	0 3 1 20	46 0 0	7 17 8	ditto
Yealand Consols	4 0 0 0	£51 5 0	245 0 0	Daubuz.
Bottle Hill	4 0 0 0	£17 6 0	247 10 0	Bischoe Co.
Hemerdon Consols	4 0 0 0	£12 6 0	254 10 0	ditto
Drake Walls	5 5 2 14	68 0 0	357 5 0	Calenick Co.
ditto	4 15 3 26	60 15 0	292 8 0	Trethellan.
ditto	11 2 3 2	61 10 0	685 0 6	Bischoe Co.

COPPER ORES.					
Sampled June 6, and sold at the Red Lion Hotel, Truro, June 21.					
Mines.	Tons.	Price.	Mines.	Tons.	Price.
Devon Great Consols	125	£8 9 0	Wheal Arthur	62	£3 11
Wheal Josiah	114	7 18 0	ditto	22	2 17 6
ditto	105	8 12 0	Bedford United	93	6 4 0
ditto	102	2 15 0	ditto	75	2 13
ditto	84	7 11 0	ditto	71	8 0
ditto	66	11 6	Holmabush	85	3 1
ditto	40	3 8 6	ditto	36	9 5
ditto	32	4 0 6	ditto	35	8 11
Wheal Anna Maria	117	4 10 6	Great Sheba Consols	86	1 19
ditto	92	4 4 6	ditto	70	2 1
ditto	89	4 2 0	ditto	8	4 10
ditto	51	13 11 6	Wheal Friendship	75	10 12
ditto	39	1 11 0	ditto	82	11 3
Wheal Fanny	88	6 3 6	ditto	29	4 0
ditto	70	5 0 6	Wheal Russell	79	6 3
ditto	68	4 11 0	ditto	15	2 8
Marke Valley	103	3 9 0	North Wheal Robert	70	8 19
ditto	102	3 7 0	ditto	13	3 16
ditto	82	3 9 6	Kelly Bray	50	2 15
ditto	73	11 0 6	ditto	33	7 0
ditto	39	3 7 0	Sortridge Consols	80	13 14
ditto	16	3 14 0	South Bedford and	64	4 8
West Caradon	96	7 13 0	E. Gunniss Lake		
ditto	86	8 16 0	Devon & Corn. United	50	2 14
ditto	79	8 16 0	ditto	10	9 5
ditto	59	11 6 0	Tavy Consols	44	5 3
ditto	49	11 6 0	ditto	3	3 11 1
Hington Down	44	11 4 6	Wheal Crebor	30	6 1
ditto	71	5 5 6	Wheal Edward	90	6 1
ditto	63	6 15 6	ditto	9	21 0
ditto	48	2 9 6	Wheal Carpenter	37	14 5
Wheal Arthur	87	7 16 0	Devon and Courtenay	17	6 12
ditto	09	4 7 6	East Wheal George	16	5 13

Notices to Correspondents.

THE POSTAGE STAMP.—On the new measure, repealing the compulsory stamping of newspapers, becoming law, we do not intend to avail ourselves of the fancied benefit it may at first sight be supposed to confer, as we shall continue the stamp on the Journal, which we conceive will prove for the convenience of our readers generally. Very many subscribers having their papers sent direct to their residences in different parts, and others taking copies in connection with some London office or friend, the printing on unstamped paper would, besides the inconvenience, entail a charge of one penny each time of going through the post, while continuing our present plan will enable the Journal to be transmitted as frequently as may be required during fifteen days; particular care always being taken that the stamp is so placed that it may be readily seen at the post-office. Besides, as we contemplate issuing Supplemental Sheets pretty frequently, stamping the Journal will also eventually prove an economical arrangement for our readers.

WHEAL GOLDEN CONSOLS.—“A Shareholder” approves of Capt. Evans's suggestion that the engine should be removed to Thorne's shaft. He thinks that the flat-rods have been the great cause of the expenditure, and at the same time they have entailed considerable delay in prosecuting operations. He intimates that much of the valuable materials underground will be sacrificed, owing to those in authority not understanding mining operations. He suggests that the committee should take these circumstances into consideration; and, in his opinion, the company are about to abandon one of the best mines in the county. His views are confirmed by several practical men. If the committee gave the management to the resident agent, he thinks affairs would be conducted with more economy, and greater advantage to the company.

P. W. G. (Stourbridge).—There is no question that it would be desirable if those who, in many instances, are entrusted with the management of mines possessed, in addition to their scientific acquirements, some amount of practical knowledge. Much of the ill-feeling now existing between master and man arises from this unhappy cause. Guided by theory, the employer often requests the workmen to perform duties which they know to be practically impossible. It cannot be denied but that the operatives are too often careless, reckless of their own lives, and all those with whom they are brought into contact. Knowledge is, however, now on the increase; and, with the spread of education, we may anticipate that the rising generation will be less sensual, and more intellectual, than their predecessors. There are many evils in our commercial system, but we cannot obtain perfection, even if we strive ever so hard to attain it. It is to be regretted that there is not a more cordial feeling between the employer and his workmen, but we think the subject may be dismissed in the words of the *Spectator*:—“There is much to be said on both sides.”

ECTON MOUNTAIN MINING COMPANY.—Sir: I shall esteem it a great favour if any of your readers can afford me any information as to the present value and prospects of this undertaking—what are they doing, and why do they not publish their reports?—U. E.: June 18.

ANGLO-CALIFORNIAN GOLD MINING COMPANY.—Sir: I trust the shareholders will see the necessity of coming forward to assist the directors. The incompetent incubus that weighed on the property is about to be removed, and there is now every hope that our affairs may be retrieved. In such case, it would be folly now to think of abandoning the property, more especially as the present superintendent, Mr. Frankhard, is a practical man, and not likely to fall into the costly errors of his predecessors.—A SHAREHOLDER: London, June 21.

C. M. (Leith).—The company is about to be wound-up. The directors were nearly all men ignorant of mining. With the exception of one, there were none who had ever before been connected with mineralogical enterprise.

MINER HEAD MINE.—Sir: I am a shareholder in this concern, and have paid up all calls. I am now told that unless more money is granted, my shares and the property both become confiscated. Well, in such a dilemma what is to be done? If I pay more money, how am I to know it will be properly expended? Now, having resolved upon this course, and I trust sincerely my brother shareholders will adopt the same:—Issue preference shares, bearing 20 per cent. interest; take the entire management out of former hands; let the direction go to Ireland—Dublin; work the mine efficiently, there can be no doubt of its goodness; look upon the past as lost time and money, and trust in our own exertions for the future. We have the property out of the fire; let us go manfully to work, and we may yet get back our money. I am ready and willing to put down my proportion at any moment: let others do likewise.—A LARGE SHAREHOLDER: June 18.

GREAT POLGOOTH MINE.—Sir: I beg to assure “A Shareholder” in this mine, that the tin sale bill, and draft for the amount, are always in my hands previous to the publication of the amount of produce, of which fact I should be happy to satisfy him if he would call at my office; as well as to state a satisfactory reason in reply to the other portion of his query. Full particulars of the sales are published at the quarterly general meetings, and sent to each shareholder, with the committee's report.—W. C. FOULKES, Sec.: 58, Old Broad-street.

WHEAL GURKUS.—The prices obtained for the ores sold from this mine at Redruth were rightly given in last week's Journal. “W. T.” had better write to the office for particulars.

PORT PHILLIP AND COLONIAL GOLD COMPANY.—Sir: Some weeks ago I addressed a complaint to you respecting the tardiness of the directors of this company in calling the annual meeting. An announcement shortly appeared, that the cause of the delay was the non-arrival of the *James Baines*, then daily expected, but that the meeting would certainly be held in the course of the present month. The above vessel has now been in some weeks, and although she may not have brought sufficiently flourishing news to tide over the meeting without discussion, yet it may be advisable for them to redeem their engagement without further procrastination, lest a degree of discontent be excited amongst the shareholders, which the arrival of even a shipload of nuggets might be unable to allay.—AN ADVENTURER: June 21.

DMURDO.—Sir: Can any shareholder enlighten me as to the real position and prospects of this mine? as it appears somewhat extraordinary that no dividend has been paid since November, 1853, if the produce of ore is as large as has been represented. Why are not bi-monthly meetings regularly held, and reports given to shareholders, in a proper business-like way? Thus to hold due communication with shareholders, to avoid exaggeration, and fulfil to the letter promises made, is the only way to create that confidence necessary to bring every undertaking into good repute, and increase the value of shares.—A SHAREHOLDER: Lincoln, June 16.

W. W. (Sheffield). must apply to a sharebroker for the information he requires. West Rosewater has, we are informed, sold ores.

MELBOURNE GOLD MINING COMPANY.—Sir: In the original prospectus of this concern, the directors promised the public that if an adequate capital was not subscribed the mine should be relinquished without discussion. I would ask the noble Chairman (the Earl Devon) why this promise has not been fulfilled; and if sufficient capital was subscribed, why has not some object been carried out to benefit the shareholders? I trust his lordship will not permit the aristocratic lustre of the coronet to be dimmed by permitting doubt longer to exist as to the ultimate honourable intentions of the directors, but at once arrange to explain to shareholders what course the directors intend to pursue to satisfy those parties whose money they have so long mysteriously retained.—GEO. GRESHAM: 4, Bail Gate, Lincoln, June 16.

“A Miner” (Aberystwith).—Much discussion with regard to mining has existed, not only in North Wales, but in other parts of the Principality, which is to be regretted. The party alluded to may be known as a great puffer, and an ignorant man; and although it is the duty of every honest person to expose quackery and fraud, this must be expressed in temperate language. The communication is libellous; and although it contains much interesting matter, is too personal for insertion. We have every desire that both parties should be heard: the columns of our Journal are open to all for free discussion, but they cannot be made a vehicle for private pique or personal abuse.

MINING IN IRELAND.—“A Large Shareholder” informs us that he has just returned from the South of Ireland, where he has been to inspect some mines in which he is largely interested, and he bitterly complains of the manner in which operations are carried on, or rather neglected, and the extravagant expenditure of the adventurers' money. He further complains that one of their men keeps several carriages, carts, &c., advancing his own interest with the company's funds, and leaving the mine to be worked as the working miners please. He says if London capitalists would give such appointments more consideration, appoint none but tried men of good character as captains, and practical miners as underground workmen, Irish capital would be subscribed much more largely towards the support of such undertakings. Under present circumstances, he has returned to London a disappointed man.

NORTH WHEAL HANSET.—“A Constant Reader.”—It is very probable the main lode will traverse Clijah and Wentworth sett, but at the present time it is impossible to give any definite opinion upon the subject.

“A Constant Reader” (Exmouth).—The establishment of a Mining Exchange is already producing good results. All mines require a certain period to develop their capabilities. A number of mines have been abandoned by the first proprietors, which, after considerable outlay, have subsequently fallen into new hands, who have received all the advantages. Patience is certainly a good ingredient in mining; it is to be hoped, however, that now a fair system will be introduced in the purchase and sale of shares. No mines should be admitted on the Exchange unless the committee were convinced that they were bona fide concerns, and not delusions, as some of the concoctions which have heretofore, on too many occasions, disgraced mining enterprise.

PENCORSE CONSOLS.—Sir: As I understand the letter signed “A Correspondent,” dated May 30, in your Journal of June 2, respecting Pencorse and other mines, has been ascribed, with ill-feeling, to Mr. George Henwood, secretary of the Pencorse Mine, may I beg the favour of your disabusing the minds of any who feel interested, by stating in your next Journal that the letter in question did not come from Mr. Henwood, neither had he, or any of the Pencorse office, the slightest knowledge of its being sent to you.—W. B.: Leeds, June 19.—(Having a similar request from others, as well as Mr. Henwood himself, we can have no hesitation, under the circumstances, of stating that the letter referred to was not written or forwarded by Mr. Henwood.)

APFELDORF MINE.—Sir: I was an original shareholder in this concern, but sold, as others did, at a great sacrifice previous to the mine stopping. Now, if there is any truth in the report contained in your last Journal, that this mine is now likely to turn out profitable, the shares in the new undertaking should be offered, by preference, to the old shareholders.—AGRICOLA: June 18.

CWMDYLLER ROCK AND GREEN LAKE MINE.—Sir: In looking over your Journal, I observe that Mr. Jehu Hitchens brings a heavy charge on the agent, Capt. Collier, for the great loss of 2s. per ton on 2 tons of copper ore sold from that mine. Now, I know that Cornish agents are often deceived when they go into Wales, and I have no doubt that Captain Collier may have been one of them; but in this instance I cannot see so much to blame him for. This 2 tons is, no doubt, the waste of the other lots, and, perhaps, cost nothing in dressing, and on this low produce, ½ per cent., turns the scale for or against the mine. This is rather nice work for an agent who has his hands and head full of more important business. Again, it is often the case that the freight on the whole lot would have been the same, as it is often a full cargo must be paid for, “full or not,” and as Captain Collier was not present to speak for himself, I have ventured to offer my opinion on the subject. The Chairman's remarks are very just. There are difficulties he had to contend with as well as the cutting through snow in the month of May. On a visit to Snowdon, I passed through this mine, and was introduced to Captain Collier, and from the conversation I had with him and others, I am persuaded he is a most deserving man, and ought to be encouraged rather than otherwise.—A MINER, WHO HAS BEEN IN WALES MORE THAN ONCE: June 18.

CONVERTING POOR ORES INTO REGULAR.—Sir: I am much obliged by your remarks respecting my enquiries as to converting poor ores into regular. I am aware that rich copper ores are converted, but in your Journal of the 9th inst., under the heading of “The Kunda Copper Mine,” I read the following:—“Operations at the Kunda Works have been resumed, for the purpose of converting the poor ores into regular.” I thought, therefore, that some new process might have been discovered.—B. L. S.: June 20.

THE LIBERTY MINING COMPANY.—Sir: A correspondent last week, who signed himself “A Shareholder,” complained that the Chairman never referred to the existence of copper in the mine, and that it would be useless to send out the nominee of Mr. Burs, because he was a copper miner, notwithstanding the last report received from Mr. Crosse states that the April ore (253 tons) had recently been sold, and had realised 1140*l.*, and that the May ore was about 230 tons, and of better quality. If your correspondent refers to the report alluded to, and which appeared in the Journal of the 25th May last, he will find it was a typographical error: a short report from Wheal Arthur, a copper mine situated at Alstock, in Cornwall, being accidentally annexed to the report of the Liberty Mine.—ANOTHER SHAREHOLDER: City, June 20.

THE NEW MINING SCHOOL.—“Mine Agent” replies to our comments of last week, but we cannot publish further remarks on the subject without the writer's name being attached. We may add, however, that “Mine Agent,” after stating that he is acquainted with Mr. Rickard, says:—“I have no ill-feelings whatever towards Mr. Rickard personally; on the contrary, I wish him every success in life; but, after having read so much of late concerning the ignorance of the existing mine agents, and the beneficial effects which would result from the new Mining School, I am exceedingly anxious that the person appointed to teach ‘practical mining’ should himself be acquainted with it. The views contained in my last letter, moreover, were not only my own, but are precisely those which I have heard expressed by some of the most influential mine agents and adventurers in the West of Cornwall.”

“C. S.” suggests that the Blaenavon Iron-Works should be placed under the management of Mr. R. Johnson, who he considers fully competent to conduct the operations to a successful result. With the knowledge of what Mr. Brown is doing at Messrs. Darby's works, “C. S.” fully anticipates that Blaenavon would pay at least 7½ per cent., if the management be placed in good practical hands, untrammelled by incompetent direction.

SHARE JOINING.—“N.” says that he was advised, some time since, by circular, to sell 100 Linares at 12s. each; but, fortunately, held on: “The result carried 750*l.* profit to me. Many other cases I could adduce of the use of judgment in mining: ordinary care only is required, as observed by Mr. Brecheley. Captain Ennor's ‘engine-fixers,’ it is to be hoped, are pretty well demolished. Truly, Sir, mining appears to be undergoing a happy transformation. Thanks to the transformers.”

THE GOLD QUESTION.—We think further discussion on this subject may now very properly be deferred until some progress in actual working has been made. Besides others actively engaged, we have the appointment of Mr. Calvert to the management of East Alfred Consols, with full powers to test the accuracy of his assays, and prove the value of the property, under the inspection of a deputation from the company. We must, therefore, decline inserting the letters of “Scrutator” and “E. R. J.,” as containing no new scientific facts, and calculated only to prolong an useless and somewhat personal discussion.

ADELAIDE LAND AND GOLD COMPANY.—In reply to two “Notices” in our last week's Journal, we are informed that the parties have been duped, and their shares got from them by a ruse. The shareholders are not liable for a shilling, the assets of the company are many thousands, and the liabilities nil. Perhaps “E. E.” will write us, in confidence, stating how she was induced to part with her shares, and on what representations, and to whom.

GREAT WHEAL MARTHA.—Sir: Your last Journal contains some remarks against Wheal Martha. Capt. Paul's report, enquired for in those remarks, appears also; and I beg to say that I was well acquainted with Capt. Samuel Henwood, one of the agents of that mine, and that I read the last of his reports, on his way to the mine, derived from miners working in the mine there. I am disposed to believe “Caradon” is much beside the mark in his estimates. If it returned “enormous profits” at a shallow depth for a copper mine, how could it become so exhausted? I was assured by Capt. Henwood that the part of Old Martha in the Sheba sett contained a better course of ore than the latter. I speak now after his death, though Sheba looked very well when he lived. I believe the present Martha also to be very good. There are those who know the lode better than I do, as to what it will do in depth. That it may be richer in price at a greater depth is probable; there are side lodes to that one, however, of superior character. A cross-cut at the deep levels, north and south, would develop in some of such, in all probability, richer ore near the cross-roads which bear ore on the Martha-Sheba lode. A better sett—I speak of Sheba more especially, since, as a shareholder, I know it more, though probably it may be the same in Martha—a better sett I would not covet for copper. Capt. Ennor's observation as to side lodes varying in quality is applicable here. I have heard of a course of ore nearly up to surface on a side lode in the sett, but do not know where it is. The authority I can pretty well rely on.—L. H.: June 21.

THE MINING JOURNAL

Railway and Commercial Gazette.

LONDON, JUNE 23, 1855.

Our confident announcement, in the last number of this Journal, that the Rating of Mines Bill either had been or would be withdrawn, has been proved correct by the order of the day for the second reading in the House of Commons having been discharged on Monday night. We also stated, quite correctly, that another bill would be introduced, and an intimation to that effect was on that occasion given to the House. This bill, prepared and brought in by Mr. KENDALL, Mr. ROBERTS, and Mr. MICHAEL WILLIAMS, we now publish in extenso:—

Whereas it has been held by the Courts of Law that the occupiers of mines in England and Wales (other than coal mines) are not rateable to the relief of the poor, and that although the land sold from such mines are rateable when reserved in kind, yet that they are not rateable when payable in money, and it is expedient that such distinction should no longer exist, and to render the rating of such mines certain and uniform. Be it, therefore, enacted by the Queen's most Excellent Majesty, by and with the advice and consent of the Lords Spiritual and Temporal, and Commons, in this present Parliament assembled, and by the authority of the same as follows:—

I. From and after the Twenty-ninth day of September next, the occupiers of all such mines shall be rated and assessed to all rates and assessments made for the relief of the poor in the several parishes in which such mines shall be situated, and the annual rateable value of such mines for the purpose of such assessment shall be ascertained immediately preceding each assessment, shall have accrued due to the lord for rent, royalty, toll, or dues in respect of such mine, or the value thereof in money where the same shall be rendered in kind. Provided nevertheless, that no rent, royalty, toll, or dues, which shall have been given up by the lord shall be included in any such estimate; provided also, that where any mine shall be worked either by the lord himself, or by any other persons, without any such reserved rent, royalty, toll, or dues, or where any fine, premium, or other consideration (other than a reserved rent, royalty, toll, or dues), shall have been paid or agreed to be paid to the lord in lieu of or in addition to any such rent, royalty, toll, or dues, the annual rateable value of any such mine shall under such circumstances and fixed at the amount which would if such mine had been respected in the usual way have accrued to the lord for rent, royalty, toll, or dues, in respect of such mine for the then previous year, to be computed as aforesaid, at the rate usually reserved in like mines within the parish or district (including the next adjoining parishes) in which such mine shall be situated; provided also, that no rate or assessment for the relief of the poor other than is herein provided for shall be made or assessed either on the lord or the occupiers of any such mine in respect thereof, or the rent, royalty, toll, or dues, arising therefrom.

II. Where the occupiers of any mine held under any lease or grant in operation at the time of the passing of this Act, whereby the rent, royalty, toll, or dues, thereby reserved shall be payable only in money, or in money or kind, at the option of the lord, shall not before the passing of this Act have paid any rate or assessment for the relief of the poor in respect of such mine, or the rent, royalty, toll, or dues, reserved by such lease or grant, such occupiers shall be entitled to deduct from the rent, royalty, toll, or dues, payable under any such lease or grant One-tenth of all sums of money by virtue of the provisions of this Act shall be assessed on such occupiers in respect of such mine during the continuance of such lease or grant; and the lord shall allow such deductions in part payment thereof, notwithstanding any covenant or agreement to the contrary contained in any such lease or grant.

III. It shall not be necessary in any such rate or assessment to insert the names of the occupiers of any such mine, but it shall be sufficient to describe them generally in any such rate or assessment as the occupiers, and in the description of the property rated to describe the mine by the name by which it is generally known, or other local description.

IV. In the construction of this Act the word “mine” shall mean any mine works or operations carried on for the purpose of searching for, raising, and rendering merchantable any metals or minerals, the occupiers of which were not before the passing of the Act liable to be rated to the relief of the poor in England and Wales; the word “occupiers” shall mean the adventurers for the time being in any mine, or other persons working the same by themselves, or their agents or workmen; and the word “lord” shall mean the owner for the time being of the metals and minerals raised in the working of any such mine before the raising thereof.

V. This Act may be cited as “The Rating of Mines Act, 1855.”

The mining interests must, therefore, be now prepared to consider both the policy and the provisions of the new measure in contemplation. It will be observed that we were substantially correct in the outline we then gave of it; and it will be seen that it proposes a system of rating all metallic mines without reference to coal mines; that the rent, dues, or royalties, reserved in every existing lease of mineral property will be taken as the standard of rating, irrespective of expenditure or profits: and that the amount of rating to be ascertained by that principle, and on that basis, must be borne in equal moieties by the proprietors of the soil and the parties working the mine.

The mining interests will at once observe that this is a very different measure from the one recently abandoned, and unless the principle be insisted on, that metallic mines are never, under any circumstances, to be rated, it is difficult to find any serious objection, at least to the scale of rating. The meeting held at Bradwell, in the northern division of Derbyshire, the details of which appear in another column, seems to have proceeded on the assumption that profits realised by the expenditure of capital and labour were to be rated. A perusal of the present bill must relieve them from any apprehension on that head; and we fear that it will be no easy task to convince the Legislature that what the landlord

receives from metallic mines ought not henceforth to bear its proportion of poor's rates, as well as what he receives in the shape of rent from houses and from land. It will be also seen that meetings of miners have been held at Castleton and at Eyam, and we refer to the very strong remonstrance of Mr. BUNGOVNE against any rating of mines in Derbyshire. In his observations respecting the uncertainty of mineral property we entirely concur; we feel with him the injustice which must be effected by an uniformity of rating on a property so uncertain and fluctuating in its character; but the miners ought to be cautious not to flatter themselves with false hopes, and to be guided in the course they intend to pursue, by remembering that Mr. BAISES, the head of the Poor Law Commission, has declared himself favourable to a general rating of mines, and that a Select Committee of the House of Lords have reported in favour of such an assessment.

The question may be considered to resolve itself into this simple proposition—is the whole poor's rate to be borne by the landlord, and is the miner to be exempt from an obligation which falls upon and is borne by every other description of tenant? We would, of course, much prefer that matters were allowed to remain in their present position, but as there seems a fixed determination on the part of the Government and the Poor Law authorities to impose a rating on mines, it is well worthy of consideration, on the part of the mining interests, whether the proposed plan does not present a fair and equitable compromise, and such as, under the circumstances, may be safely and prudently accepted. In considering the question, those engaged in mining operations may assume that the Government authorities, doubtless influenced by the agricultural interests, have resolved that all mines shall henceforth participate in the burdens of the Poor Law, and the proposed arrangement may, and probably would, be far more liberal to them than one prepared by the Poor Law magnates, if the administration were to depute the task to that Board. We do our duty in directing attention to the matter, and we invite the opinions of those acquainted with the subject as to any injustice which it may entail, or as to any evils which may be anticipated from it.

The retrospective effects upon all existing contracts are clearly defined, and may be easily understood. There may, however, be more difficulty in dealing with its prospective operation, and this is the branch of the question that requires most deliberation. It is highly desirable that a measure of this nature, which must to some extent guide and govern future mining arrangements, should be framed and settled with great circumspection and precision, so as not to supply materials for future litigation. We have, we conceive, rendered good service in devoting our humble but strenuous efforts to defeat the bill which has been recently withdrawn; and, reserving to ourselves the free exercise of our unbiased opinions, and unpledged to any peculiar views, our conduct, in respect of the present measure, shall be guided solely by a desire to protect the existing and advance the future mining interests of the country.

The case of the IRISH CONSOLS MINING COMPANY, now in course of being wound-up in the Court of Chancery in Ireland, which we presented to our readers in our last Journal, has led to many communications. We are not surprised that the language which fell from the Master of the Rolls, in delivering his judgment, should have created misconception, and even alarm, if it could be for a moment imagined that his observations were applicable to, or were intended to reach generally, joint-stock companies trading in that country. A judge ought, however, to be particularly cautious in confining his remarks to the facts of the case under adjudication, for the public mind is peculiarly sensitive, when censure falls from the elevation of the Bench; but we freely confess that we do not think there was in this instance ground for supposing that any sweeping denunciation could have been intended for mining or other companies. The circumstances attending the case immediately before the Court, in our mind, fully justified the line adopted towards that company; but, perhaps, it would have been more prudent in that learned personage to have qualified his observations, and to have expressly confined them to the Irish Consols Company alone. It cannot be readily forgotten that the Master of the Rolls of Ireland was the head of the Royal Commission that reported against the principle of limited liability, and that although there were commissioners who dissented, the report was in accordance with his views. As Parliament has repudiated, and in effect annulled that report, and as both the Legislature and the Government are now adopting a course diametrically opposed to the recommendation which it contains, Mr. SMITH ought at the present moment to have been peculiarly circumspect, and we regret that the language he used was so general and so unmeasured as to appear to condemn joint-stock companies altogether.

In commenting on the case before him, he observed that the management “afforded a good illustration of the manner in which joint-stock companies are carried on in Ireland.” A little reflection would have told him that, although well warranted in arraigning the directors in this individual case, many companies in Ireland furnish remarkable illustrations of the admirable manner in which joint-stock associations can be legitimately conducted. We need only refer to the Mining Company of Ireland and to the Wicklow Mining Company, as examples of one branch of enterprise, and we hope to see the Clew Bay, now that it is relieved from the embarrassments of litigation, emulate their example. Joint-stock banks have been singularly successful in Ireland, and the advance of their shares is, even at this period of general depression, without a single exception progressive, indicating not only prudence and probity in their management, but also increasing prosperity in the country, perhaps in a great measure attributable to them. If we turn to railways, which in their formation furnish the most unerring tests of capital, and in their receipts the most convincing proofs of progress, we find the most steady and well-paying line in the British islands an Irish line—namely, the Dublin and Kingstown. It may, perhaps, be said that is a short line; if we, however, take the longest in the country, the Great Southern and Western, we find the value of its shares in the space of three years nearly doubled, and now above par, quite equal to the best English railway companies, with a steady weekly augmentation in the traffic receipts. We have thus all the established joint-stock associations of the country refuting the condemnation of the Master of the Rolls, if it was intended to be general; if, on the other hand, it was designed, as we presume it was, to apply to the individual case, it certainly ought to have been circumscribed within more precise and definite limits.

We should much have preferred that the directors of the Irish Consols Company, of which Mr. GEORGE MACARTNEY, the petitioner, was one, had arranged their affairs without, by the disclosures they made, subjecting themselves to the animadversion of the Court, and unjustly bringing discredit on mining operations. As we observed in our last Journal, if any other company, such as an insurance company, a steam navigation company, or a building, or any other save a mining association, is either from mismanagement or misfortune ordered to be wound-up, the general system of which it formed a part is not assailed, and the particular case is fairly disassociated from the class. It is, however, too frequently otherwise with mining companies, and the whole system invariably suffers from every unfortunate individual instance. Parties, therefore, who assume the responsible duties of managing a mining company ought to reflect that misconduct on their part invariably affects, both directly and indirectly, through various channels, that highly important branch of national industry. Any check which mining enterprise should now receive would be felt in Ireland as a calamity, when the country may be said to have been redeemed and regenerated by the operations of the Incumbered Estates Act. A recent summary of the proceedings in that Court, brought down to the 8th of the present month, enables us to speculate with confidence on the future progressive advance of the sister island. We find 955 owners of estates, conscious of their inability to relieve themselves of their burthens, becoming petitioners themselves, and bringing their own properties into the market. We find 5024 different lots of land changing hands, and 6675 natives of the country becoming purchasers and proprietors. The comparative number of English, Scotch, and foreign purchasers, only 220, furnishes, we conceive, strong ground for congratulation, for it shows that Ireland possessed within itself the means of dealing with its own land. It is not, however, to be imagined that the infusion of new blood was an inconsiderable acquisition to the country, for the estimated extent of land bought by strangers amounted to 555,000 acres, and their purchase money was 2,271,010*l.* 12s. 6d. Of this total produce of all the sales amounted to 15,239,570*l.* 0s. 6d., and of this no less a sum than 11,087,098*l.* 7s. 9d. has been already distributed in cash and stock, while a sum of 1,673,567*l.* 0s. 8d. has been allowed to incumberancers who have become purchasers. With such elements of improvement, with a country so rich in mineral and agricultural wealth, singularly endowed by Providence with the means of forming the most extensive sea and inland fisheries, is it an idle speculation to predict that when the Law of Partnership shall become intelligible, and that of joint-

stock companies shall be liberalised, Ireland will form an ample and legitimate field for their formation? It is with this feeling that we deprecate any attempt, no matter from what quarter it may come, which should have in the slightest degree the effect of damping the spirit of enterprise, or diverting English capital from what we may fairly term home investment.

We perceive, with much satisfaction, that a special committee of the House of Commons has strongly recommended not only increased but greatly accelerated communication between the two capitals, London and Dublin. The bill for improving the communication between England and Ireland, and for authorising arrangements between certain companies in England and Ireland, has been made the subject of a special report. The companies alluded to are the London and North-Western, and Chester and Holyhead Railway Companies, and the City of Dublin Steam Packet Company. We think, however, that the committee are entitled to the utmost credit for having, while approving of the preamble and policy of the measure, in opposition to the proposal of the promoters, distinctly stated to the Government and the Legislature their opinion that the entire distance may be accomplished in eleven hours. For this purpose there will necessarily be required additional postal accommodation, and steamers of a class to ensure a uniform speed at sea of twenty miles an hour. When these contemplated arrangements shall be completed, we see no reason why companies shall not increase, why English capital should not freely flow into every legitimate channel, and why Irish shareholders should not exercise a personal supervision over the directorates of mixed companies in London, and by their presence prevent a repetition of such mismanagement as it has been our unpleasant duty to expose and deplore.

A bill of some importance to employers, and amongst them to the proprietors of coal mines, and others interested in mineral property, is at present passing, and apparently without much notice, through the House of Commons. We allude to that introduced by Mr. CHARLES FORSTER and Mr. HENRY BRUCE, "to alter and amend the Act of the 1st and 2d years of King WILLIAM IV., chapter 37, which prohibits the payment of wages in goods, commonly called the Truck Act." That Act was intended to prevent the payment in certain trades, of wages in goods, or otherwise than in the current coin of the realm; and the preamble of the present measure declares that it has been found insufficient for its intended purpose, by reason of the various modes of evasion resorted to by persons employing labourers in such trades. We have from time to time submitted to our readers occasional cases, which have occurred principally in relation to collieries, in which these evasions have been attempted, but they have generally, when judicially considered, proved ineffectual.

The first section of the intended law provides, that if in any of the trades enumerated in the Truck Act, now intended to be amended, any goods, wares, or merchandise, in the profits or sale of which any employer shall, either directly or indirectly, have any share or interest, shall have been sold, delivered, or supplied to any artificer, or to any one on his behalf, in advance of any settlement or wages, the value of which shall have been stopped from or paid out of his wages due at such settlement at the time of the receipt thereof, or repaid as on account of money lent, or otherwise passed in account between the said artificer and his employer, or any one on his behalf, or if, in order to secure payment for such goods, any restraint shall be placed by the said employer, or by any one on his behalf, upon such artificer, which shall prevent the said artificer from having the full and complete disposal of the entire amount of his wages, such goods shall be deemed to have been had and received by such artificer on account of wages, and the delivery of such goods to have been a payment made otherwise than in the current coin of the realm, and to have been illegal, null, and void, within the intent and meaning of the third section of the said recited Act. This provision is quite in accordance with the policy which dictated the original measure, being, in effect, merely declaratory of it, and of the decisions which have taken place upon it. We hope that there will be henceforth no misunderstanding on the subject, and that we shall hear of no further attempts to defeat the law.

The second section imposes a penalty for the first offence not exceeding 20*l.*, nor less than 10*l.*, and for the second offence a penalty not exceeding 50*l.*, nor less than 20*l.*, on any employer of any artificer who shall, by himself or by the agency of any other person or persons, directly or indirectly, enter into any contract, or make any payment, declared illegal by the former or by the present Act. The previous clause forfeits the amount, while the present clause creates a pecuniary penalty; there can scarcely, therefore, be a more emphatic legislative declaration of the illegality of paying wages in goods.

The third section then authorises any stipendiary magistrate, appointed in any town, city, liberty, or borough, sitting at a police court or other place appointed in that behalf, to hear and determine alone any informations under the former Act, or under this Act, and to do all acts by either of them directed to be done by justices of the peace in Petty Sessions assembled.

The fourth section is an important one, for it provides that, on any indictment for a misdemeanour for unlawfully conspiring to defeat the provisions of the former Act, or of this Act, the costs of the prosecutions shall, upon conviction, and in all cases of acquittal, unless the Court shall otherwise direct, be allowed, as directed by the Act 9 Geo. IV., c. 64, and by the Act 14 and 15 Vict., c. 55, amending the said last-mentioned Act, and the provisions of both of the last-mentioned Acts empowering Courts to order payment of costs, expenses, and compensation for trouble and loss of time, in cases of the misdemeanours therein mentioned, shall extend and be applicable to indictments for misdemeanours for unlawfully conspiring to defeat the provisions of the previously mentioned Acts.

The fifth section then enacts that the former Truck Act and the present shall be construed together as one Act.

The measure would also appear to be general, and to be intended to apply to every part of the United Kingdom. We would suggest that the intended Act may be made more perfect by the introduction of an interpretation clause, providing that the term "artificer" shall be held to mean any collier, miner, or other person receiving, or entitled to receive, wages; that the word "agency" shall be held to include overseers, and all other persons employed over men; and that the words "stipendiary magistrate" shall mean any magistrate paid by the Crown, whether employed in any county, shire, or other district. We believe that the former Act has, in general, operated very beneficially; the evil which it was intended to prevent has been materially checked; and we hope that the present bill, when it passes in a perfect form into a law, will effectually extinguish a system so unjust and so injurious in its effect upon the character, comforts, and condition of the operative classes.

[FROM A CORRESPONDENT.]

The cry at present is for administrative reform, and although the committee have commenced with the Government, it is not only there that corruption exists; in fact, it is found not only in great corporations, but even in little companies. The MINING JOURNAL is not a medium for political discussion, but its columns are always open to point out any abuses which exist, and which are prejudicial to legitimate mining enterprise. In order to ensure success in mining, as elsewhere, it is always necessary that those at the head of affairs should be competent persons for the situations they hold. What are they? In many instances needy speculators, greedy adventurers, ignorant of the first principles of mining, but possessing a great knowledge of trickery, knavery, and the gullibility of their fellow-men; with a specious bearing, a plausible appearance, a pompous tone, and an assumption of knowledge, they impose on their dupes, who do not discover their mistake until the bubble is burst, and the projector has put several hundreds into his pocket, at their expense.

The mining agent appointed by some of these committeemen is entirely under their control, and is forced to carry on operations against his better judgment and firm convictions. The principal man has talked largely to him, promised him a better situation, told him that his wages should be raised, given him to understand that he is the Alpha and Omega of the company, and if he implicitly obeys him that he will always be his friend; he leaves him to imagine that he is a rich man, when the probability is that he has not one farthing beyond the amount he obtains from those whom he so has grossly deluded. It is to be wished that mining agents would have more confidence in themselves, and whenever a non-practical interference takes place, even although they may be forced to carry it out, strenuously protest against it. If such were the case, they would be supported by the shareholders, and mining in general would not be in such disrepute. Not only do individuals of this class fraudulently obtain money from the public by ushering worthless schemes on the market, but if by chance they are connected with a good property they invariably ruin it; they have no honesty of purpose, and in many cases, to use a sporting term, prefer going on the cross rather than remaining on the square. An instance of this has lately occurred. A mine, from which some thousands

of pounds has been made, was transferred to one of these individuals; the property was unquestionably a good one, and in other and honest hands would have before this been dividend-paying. The way the workings were commenced was after this fashion—that from the moment operations commenced the expenditure should not exceed the cost; the company was divided into shares; the managing committeeman received a salary for deceiving the shareholders and spoiling the property (of course a proportionate number of shares was divided among the projectors); in order that these should be at a premium in the market, ores were sold; these were dressed to a higher per centage than they could bear, reckless of all cost. It was necessary they should figure in this list, in order that the shares of a few individuals should be sold. Liabilities were incurred; these for a time were kept in the dark, and a promising property has been damaged, and disrepute thrown on mining in the surrounding district, owing to the incompetence and mismanagement of those who were unfit for their position, having no other knowledge than the previous concoction of some abortive and delusive schemes. Many other like instances could be cited, and the names of places and individuals given, but this, at present, is needless, and where so many abuses exist, would be invidious to particularise.

The Government and the public have long since seen the necessity of establishing a school for mines, but these and the practical men of the present day cannot be efficient so long as they are paralysed and obliged to work contrary to their reason, at the dictation of an ignorant jobber, who cares nothing for mining, but merely wishes to get his shares to a premium. How many London managers or secretaries have the slightest knowledge of mining? and yet in most instances it is these men who give instructions to those who have spent the best part of their life underground. A man taken from behind the counter—a lawyer's clerk, who can advance 100*l.*, or sometimes less, is competent to become the managing director of a mine. It is satisfactory to observe that notice is being taken of these crying abuses in the MINING JOURNAL, a paper which has constantly endeavoured to forward legitimate mining enterprise, both at home and abroad. A reform has taken place with the subordinates, and we are led to imagine our agents will be a superior class to their predecessors; but to render mining healthy all the corrupt fungi which has thrown discredit on our mineral industry must be eradicated and entirely swept away, and re-echoing the popular cry, in the management of mines both in London and Cornwall, and other districts "The right man must be in the right place."

"God sent food, and the devil cooks," says the proverb. Legislative wisdom is supposed to produce Acts of Parliament, but Governmental incapacity most assuredly administers them; and although this, like other public journals, is scarcely ever without some complaint of the conduct of our Government departments, yet we know of no case where their ill-regulated character is more apparent than in the administration of the new Patent Act, in which we, as promoters of the reform of the Patent Law, feel especial interest, knowing, moreover, that the efficient working of the Patent Law is a matter affecting many of our readers.

Foremost amongst the mal-administrations of the new law is the fact that, whilst by virtue of the provisions of the new Act it was formally ordered by the Lord Chancellor and the Master of the Rolls that, with regard to oppositions to the grant of letters patent, the person opposing a grant of letters patent should pay to the law officer and his clerk fees amounting to 3*l.* 10*s.*, and "the petitioner, on the hearing of the case of opposition," should also pay 3*l.* 10*s.* Yet the two law officers concerned act as if there were two orders—one for the Attorney-General, and the other for the Solicitor-General; for the present Solicitor-General, finding it convenient to take the hearing piecemeal, much after the fashion of the Masters in Chancery with their half-hour's hearings, levies the 3*l.* 10*s.* for each sitting, as a distinct hearing; whilst the present Attorney-General contents himself with receiving the 3*l.* 10*s.* once, although the hearing of the case of opposition may have been adjourned several times. Thus a person opposing or opposed before the Solicitor-General may have to pay more than the cost of letters patent, and before the Attorney-General will most probably have to pay but the one fee, as directed by the order of the Lord Chancellor and the Master of the Rolls.

Again, as we some time since pointed out, that rule at the Patent-office which obliges the applicant for letters patent to file his notice to proceed (at a cost of 5*l.*) two months at least before the expiration of his provisional protection, thereby practically reducing the benefit of the provisional protection within more narrow limits than even those restricted by the Legislature, is another mal-administration of the law, being decidedly hostile to the spirit of the statute, and apparently contravening the letter of it, inasmuch as its 12th clause says—"The applicant for letters patent, so soon as he may think fit, after the invention shall have been protected, provisionally or for six months, under the Act," may give his notice to proceed. Now, supposing one month, and not two months, before the expiration of the provisional or six months' protection, should be as "soon as the applicant should think fit," in a particular case, he would be debarred from availing himself of the clause in question, because of the rule observed at the Patent-office. Hence, it appears that this rule and the Act of Parliament are at variance with each other, and since no rule can be by the statute be valid which is inconsistent with it, this rule must be bad in law, and its operation is most oppressive to the poorer inventors, many of whom have thereby lost their property. The general system of business is also decidedly objectionable. For instance, certificates or receipts for the deposit of most documents are never given at the time, but must be called for days afterwards.

Transcendently objectionable, however, is the practice pursued with regard to special applications to the Lord Chancellor for extension of the time to seal and specify letters patent in cases where those legal processes have been delayed by accident, such applications being almost always answered unfavourably, by an endorsement of "No order," unless the party make application by counsel in open court (at considerable expense); in which case, petitions previously so answered having been at first placed in the hands of the Clerk of the patents, to be laid before the Lord Chancellor, have been afterwards favourably answered by his lordship in court. In fact, the whole practice of the Government Patent-office seems to be intended to defeat the professed objects of the Act of Parliament (except as regards the department administered by Mr. B. WOODCROFT, which is admirably conducted), and we wonder how it is our old correspondent, Mr. CAMPIN, and the other patent reformers, do not bestir themselves.

In another column will be found a report of the adjourned general meeting of the ANGLICAN-CALIFORNIA GOLD MINING COMPANY. Although the statement put forward by the Chairman was not so satisfactory as might have been anticipated, yet considering the adverse circumstances the association have had to deal with, on the whole it must be considered favourable. It appears that so soon as the rains took place the engines commenced working, but this was found insufficient and incapable of performing its duties, the consequence of which several breakages took place, which in the end totally impeded operations, and the COCHRAN machine, so lauded by Sir HENRY HUNTLEY, was found to be worse than useless, and Mr. PRANKHARD, the practical superintendent, strongly advises that the stamps now lying on the premises should be put up. One practical result, despite these misfortunes, has been arrived at—320 tons of quartz have been crushed, which has realised 1694*l.*; the average value per ton was 5*l.* 6*s.* About 30½ tons per diem could be crushed, and this would yield a profit of 1*l.* 10*s.* per ton; it must be remembered that this was not the result of a continuous crushing, but has to be carried over several days; and if a proper system of working, and economisation of labour were introduced, there would be no question of the amount of profit to be arrived at. Under Mr. PRANKHARD's able and practical superintendence, there is every hope that operations will be conducted on a different scale than those hitherto pursued, and the directors will afford him, as far as lays in their power, the means of carrying out the practical suggestions he has offered. The facts must not be disguised: hitherto all the calculations that have arrived to hand have been found to be based on false and delusive estimates. Sir HENRY HUNTLEY has, no doubt, been actuated with the best intentions; he was not a practical man, and certainly the quarter-decks of HER MAJESTY'S ships are not good schools for mining. Had this gentleman a few years since been able to tell the directors the sum he required, they would have had no difficulty in finding the requisite capital. At the period the second issue of shares took place we were inundated with letters from shareholders, complaining that the directors would not allot them as many shares as they demanded. Why was not this done? Guided by Sir HENRY HUNTLEY's representations, the directors believed the capital would be ample, and exercising a wise discretion, they did not require that further shares should be issued than were necessary to meet the emergencies of the case. The money so raised has been expended,

and since then Sir HENRY HUNTLEY has required more; and the machinery, which last July at the general meeting he stated was perfect, now, when practically put to work, has broken down. A different mode of working is about to be adopted, and we may reasonably hope that there will be an end to these untoward events.

As will be seen, either by the subscription of 1*s.* per share, or the issue of preference shares, the directors have been unable to obtain the sum they require for carrying on the works, and power has been given them to appoint a committee of shareholders to consult on the best mode of obtaining the required capital. When we look at the amount of quartz raised, and the capability of the company's works in Brown's Valley, it will be seen that the preference shareholders, who are guaranteed a dividend of 25 per cent., can run no risk. The mine is now under practical management, and much of the distrust which previously existed must necessarily now be removed. The shareholders have a good property, an honest and working body of directors, who insisted at the meeting in reducing their remuneration one-half; and at the same time it must be remembered that for the last three years they have received not a penny for their services. Unfortunately, at the scene of operations they have had not only to contend with climatic difficulties and natural obstructions, but, to use the mildest terms, they have been deceived by sanguine and costly inexperience. All these things are passed, they cannot be remedied, and the shareholders must now use energetic exertions, in order that they may reap the benefit of the capital they have already invested. It is not fair that the directors, who have hitherto borne the brunt, should still continue to do so: the shareholders must bear their equal proportion of the responsibilities, if they will reap the benefits. As soon as the committee of shareholders is appointed, we have no doubt they will act most cordially with the directors; and from their joint labours we can but augur a favourable result.

The delay in bringing forward the two bills introduced by Mr. BOUVIERIE for limiting liability in joint-stock companies, and for permitting money to be lent on contracts, that the lender should be entitled to receive a proportion of the profits, without incurring the legal responsibility incident to the position of a partner, has led to some misgivings as to the sincerity of the Government. The bills appear, however, to have been fixed for discussion, and we shall probably, before our next Number appears, have an opportunity of ascertaining the views adopted in Parliament with reference to both measures. In case these bills should not be passed in their present form, we would earnestly urge a more simple mode of legislation—viz., a general alteration of the Law of Partnership by a statute declaratory of the express rights and liabilities of parties who should associate themselves either with public companies or with private firms, by the advance of the capital at their command. There are many opulent men amongst the wealthier classes in this country who would gladly advance the junior members of their families, and other relatives, in trade; and others who would, in many instances, promote the views of ingenious and scientific individuals in legitimate commercial speculations, if they were not apprehensive of the alarming consequences which may result to them from our existing partnership laws. We wish to see these apprehensions removed, and instead of refining and creating fresh difficulties, a plain and simple alteration of the restrictive laws which cripple that important branch of our jurisprudence would, by a short declaratory statute, such as we have suggested, probably meet every case, and satisfy the requirements of the country.

A few weeks ago we called attention to a number of circular letters which had been sent to shareholders in different mines, depreciating the property they held, and advising them to sell, and reinvest in other shares, which the writer of the circular could strongly recommend—in many instances, the shares so strongly recommended to one party being as disparagingly spoken of to others who held them, and who were advised to sell. We stated at the time that it appeared to us somewhat singular that persons should be found so anxious to buy shares, which they described as almost valueless, and "used up." We find, however, that notwithstanding the exposure of this system in the *Mining Journal*, it is still going on, and we have this week received several communications from correspondents, calling our attention to letters they have received in the same style, though differently signed. One poor man in Dublin who holds a few Alfred Consols is informed that the mine is rapidly declining, and he is earnestly advised to sell them at 11*l.* 10*s.*, in exchange for shares in Kilraine at 8*s.*, as the latter mine is turning out one of the first in Ireland.

STOCK, MINING, AND RAILWAY SHARES IN IRELAND.

[FROM OUR CORRESPONDENT IN DUBLIN.]

JUNE 21.—The absence of any important news contributes to depress the market for public securities, and a reaction downwards of about 15*s.* per cent. has taken place both in Consols and New Three per Cents. during the last week. Shares were also rather weaker in tone, but sales were not forced. General Mining Company shares have advanced ½, while Mining Company of Ireland, and Wicklow Copper Mining shares have been done at a decline in the former of 1*l.*, and in the latter of 2*l.* per share. In railways there has been no change, with the exception of the Dundalk and Enniskillen shares, which have advanced from 13¼ to 14¼, at which latter price they were done to-day.

The half-yearly meeting of the Mining Company of Ireland will be held on the 5th of next month, to receive the report and accounts to the 1st inst., and to elect auditors for the ensuing year. The cake of silver which this company had for sale, and to which I alluded in my last, was bought by Messrs. Haggard and Pixley, of London, at 5*s.* 5½*d.*, the assay being 15½ dwts.

The Dublin Geological Society held their usual monthly meeting on the 13th inst., when papers were read on "The Drift Beds of Ireland," "The Granite of the Three-rock Mountain," and "The Carboniferous and Devonian Rocks of the South of Ireland," all of which were of a highly interesting character.

A circular, signed by Messrs. Charles Herrman, W. J. Lowe, and J. Hackett, as trustees of the Mizen Head Mining Company, was sent to the shareholders here, urging them to come forward and save the company's property; and stating that a new account would be opened at the bankers to receive subscriptions, with which the former directors would have nothing to do, so as to pay off existing liabilities, and to prosecute the working of the mine. Accordingly a meeting was held here on Monday, and was attended by representatives of over 1100 shares, when a resolution, unanimously adopted, was transmitted to the trustees, and to the effect that if the management be transferred in whole, or in part, to directors formed from the Irish shareholders, that the latter will join in paying off the present debts and in prosecuting the undertaking, but if not, that immediate steps will be taken to wind-up the concern. This is another, and not a bad specimen of those companies referred to in my last as so disgraceful to mining in Ireland; and I hope that the examples thus set will act as so many warnings to future speculators.

The Duncrub Salt Mines (near Belfast) are still progressing with great energy. At the present time the company are building, contiguous to the mines, a row of substantial stone houses for the accommodation of the assistant manager and some of the men; and the whole appearance of the place indicates a combined regard for utility and comfort. There are two shafts to the mine (about a dozen ft. apart), 561 ft. in length. The whole extent of the mine below is 123 by 93 ft., and the natural roof of rock salt is supported by four large natural pillars, which the miners have finished off like pillars of masonry, with considerable taste. All the excavation is done by blasting with gunpowder, and it is estimated that about 20 tons an hour of rock salt are brought up to the light by the steam-raised buckets. The miners work only eight hours a-day, and remain down all this time. When the rock salt is brought up it is thrown into a cistern, which can be filled with water by a pipe, and here the salt is melted and held in solution for a length of time. The water thus filled with brine then passes through other cisterns, till it reaches the salt pan, out of which it is shovelled into bags, and then left for a time to discharge its moisture. The company have constructed a railway from within a short distance of the works, connected with the Ballymena and Belfast line, and at the present time the arrangements at the Belfast end of the line, in the way of cisterns, pans, houses, &c., are almost in a state of completion. A short and curved line of railway is being made between the houses referred to and the quay, where the salt will be shipped. It is gratifying to learn that the enterprise, so far, has been successful.

The report of the directors of the Londonderry and Coleraine Railway was circulated among the shareholders for some days previous to the meeting, which was held on the 16th inst., and I have to regret that it was not a more favourable exposure of the company's position. The pro-

position of the directors, that the line be leased to Mr. McCormick, has, I perceive, been adopted; and although the agreement is not as good as one as might be desired, it seemed to the shareholders at the time, as well as I can understand, the only one suited to the emergency of the case. In this instance, also, the office of the company is in London; and when I draw attention to this fact, I must not be understood to throw any blame upon the directors or officials of this or the other companies to which I will now advert; but to condemn the principle that the affairs of any large concern can be properly or efficiently managed at the distance of 400 miles from the scene of action.

The Cork and Bandon, Londonderry and Coleraine, Londonderry and Enniskillen, Newry and Enniskillen, Newry and Warrenpoint, and Waterford and Kilkenny Railway Companies, almost the only ones to which I can turn with regret from the frightful depreciation in the market value of their shares, have their head offices in England; and this fully bears out the case which I now submit. English proprietors have, of course, an undoubted right to be placed as directors over their property, but what I contend for is, that detailed management should be left in the hands of local men, who must necessarily be best qualified, being on the spot, to act up to the exigency of whatever case may come before them. For some time past there have been negotiations pending between the directors of the Cork and Bandon Company and some of the Irish proprietors, and I believe that before long the management of this company's affairs will be transferred to Dublin, as the only means of saving the property.

IRON AND COAL TRADES OF YORKSHIRE AND DERBYSHIRE.

[FROM OUR CORRESPONDENT IN CHESTERFIELD.]

JUNE 22.—The reports of the Iron Trade during the week are, on the whole, favourable, but it is not very pleasant to hear of the numerous failures which have occurred in Staffordshire; however, we have not heard of any houses in Yorkshire or Derbyshire which have been affected by the pecuniary state of affairs in that county. Plates and sheets have been in better demand, and most of the first-class houses refuse to accept new orders at last quarter-day's prices, with the fullest conviction of an advance being declared at the next quarterly meetings. Stocks are said to be low in the United States; and if these failures do not check confidence, we may expect a continuance of that active trade which we experienced before the commencement of our inglorious Eastern struggle.

The latest advices from the States being favourable with regard to crops of corn, cotton, and other articles, an improvement is taking place in the Steel Trade, though most branches of the cutlery business is dull.

The Coal Trade is dull, and the high price of the article militates against the interest of the manufacturers to such an extent that, with the depression in other branches of commerce, it is not worth his while to increase his production at prices which must, under present circumstances, be very unremunerative.

The feverish agitation which has been going on in Derbyshire for the last few weeks, in reference to the rating of metallic mines, is unabated, and the miners seem determined not to submit to a measure which showed so much legislative blundering and injustice. Mr. Burgoyne has done noble service in the cause, by explaining to multitudes of anxious hearers the unfairness of the proposed measure, and we are glad to hear that the miners of Derbyshire have resolved to acknowledge his labours by the presentation of some public mark of their esteem. He is a sound, practical adviser in all mining matters, and has done more than most individuals to develop the mineral resources of Derbyshire.

BRADWELL.—Owing to the very great excitement existing in the northern division of Derbyshire, occasioned by the attempt of three Cornish members to pass a bill to render mines rateable to the relief of the poor, a densely crowded meeting was held in the Town School-room, Bradwell, on Wednesday evening, the 13th inst., Mr. J. H. TAYLOR, M.R.C.S., was voted to the chair, but being called away on urgent professional business, it was unanimously agreed that Mr. WILLS should preside.

The CHAIRMAN observed that it would be quite out of place in him to attempt any lengthened address to the audience—first, because he was not sufficiently acquainted with mining operations to do anything like justice to the subject of debate; and secondly, because the gentleman whom he had to introduce to the meeting was not only practically conversant with mining operations, but had the tact in a popular, forcible, and lucid manner to give expression to his thoughts. Before introducing the gentleman referred to, he might be allowed to observe, that so far as he had considered the bearings of the bill in question, he conceived it calculated to render mines not worth the consideration of either proprietors, agents, or workmen. He said that he considered that they were already sufficiently burdened, and in most cases the existing burdens were intolerable to be borne. (Hear, hear.) The Chairman then called upon Mr. Thomas Burgoyne, of Eyam, to address the meeting.

Mr. BURGOGYNE was received with loud and continued cheering. He commenced his very eloquent address by observing that the proposed bill was altogether inapplicable to the case in hand, that it was unjust in principle, and not calculated to become practical in operation, and that it was altogether uncalled for. In referring to the Act passed in the 43d year of the reign of Elizabeth, cap. 2, he observed that that Act was just and equitable; based, as it was, upon the certainty of one class of mining operations, and the fluctuating and uncertain character of the other. In the case of coal mines, proprietors, agents, and viewers could make as correct a calculation as to the cost of production, and ultimate profit of their several mines, as ordinary manufacturers could. But he said that the case was quite different with lead mines: a number of individuals might be tempted, by the flattering sight of a piece, or vein, of ore in some locality, to sink a shaft, and heartily to commence mining operations; and, after a few months' hard toiling and much outlay, might have their hopes raised still higher by another vein presenting itself, and on this speculate still further, and get a powerful engine and other appurtenances to enable them to carry on their operations more expeditiously; and it may no sooner be at work than their hopes were suddenly blighted by the disappearance of the vein. And though they may continue to work the mine, no profit, but continual loss, accrued to the parties concerned. He observed that such cases were by no means rare. He said that they were already taxed 1-13th, or thereabout—i. e., 1-20th to the lord of the manor, and 1-40th to the executor of another gentleman. These remarks apply to this place; there are other lead mining districts which are taxed more. These dues, he it observed, are already rated to the relief of the poor. Taxation is generally understood to be made upon real property; but the lead miner is taxed the very first dish of ore he gets, in tolls, &c. Hence it may be clearly seen that it would be unjust in the extreme to make lead mines rateable to the relief of the poor as well as coal mines, in the same sense. Mr. Burgoyne, after making further remarks on the injustice and impracticability of the bill, read some communications which he had received from several Members of Parliament, expressing their determination to oppose the bill; and concluded his address by moving that a vote of thanks be presented to the Members for North Derbyshire, for their attention in forwarding copies of the bill, and for their willingness, expressed in communications to him, in behalf of the various committees, to render them all the assistance in their power, in the shape of information, &c., which was seconded by Mr. B. Somerset, and unanimously carried.

A vote of thanks was then moved, and carried unanimously, to Mr. T. Burgoyne, the speaker, for his philanthropic interest and valuable assistance on this occasion. A committee, consisting of the following gentlemen, was then formed:—Messrs. Benjamin Somerset, John Hallam, C. Morton, Job Hallam, Joshua Jeffery, Isaac Eyre, Frederick Morton, Samuel Howe, George Bradwell, J. Wills, John Bancroft, and J. H. Taylor. After which a special vote of thanks was unanimously carried, with much *déclat*, to Mr. Hadfield, the Member for Sheffield, for his attention and statesman-like communication in reference to the bill. A petition, hastily got up to oppose the bill, was signed the day following by 355 of the freeholders and others of Bradwell, and had the petition remained open for signature another day, there would have been very many more.

On Saturday night, the 16th inst., another large meeting was held in the above-named place, for the purpose of reading over some parliamentary communications which had been received by Mr. Burgoyne, and to discuss other matters relative to this movement. Mr. BENJAMIN SOMERSET was most cordially and unanimously invited to preside on this occasion.

The CHAIRMAN opened the proceedings of the meeting in his usually calm and dispassionate manner. His arguments were such as could not be overcome, because they were founded on practically correct bases. After making some remarks on the injustice of the bill, and debt of gratitude we owed to Mr. Burgoyne for his very valuable assistance, he called upon Mr. Wills to read over some letters which had been received by Mr. Thomas Burgoyne from the Member for North Derbyshire and others, as well as some extracts from the amended bill. Afterwards several short,

pointed addresses were delivered, and a free discussion on the unreasonableness of the amended bill took place.

Mr. JOSHUA JEFFERY, lead ore buyer, addressed the meeting to the following effect:—He said it was well known that he was in the habit of going amongst miners for the purpose of buying their ore; and he knew, from what he saw and heard from time to time, that it was quite impossible (and, therefore, unreasonable to expect) for miners to pay any more in the shape of taxes. He said that, in his opinion, there was not a class of men who were so heavily taxed. He thought that it was very hard and inconsiderate on the part of the Member who brought in the bill; for the miner already paid 1-13th of his hard earnings.

Mr. HALLAM, the next speaker, observed that he thought there was something so flagrantly unjust in the bill as to render it impossible for it to pass, when Parliament was informed of the taxes they, the miners of North Derbyshire, already paid. It was tolerably clear to him that the Cornish Member did not understand the nature of mining operations in North Derbyshire. He thought it would be wise in the High Peak miner to petition the lord of the manor to remove from them a part of the burden they had already to bear.

Mr. F. MORTON stated that his Grace the Duke of Devonshire had been petitioned; but, from what he had heard, the duke had never seen it.

Mr. CLEMENT MORTON, mineral agent, said that he fully concurred in all that had been advanced, and he did not see how such a bill could pass into a law.

The following resolution was unanimously adopted—viz.: "That the miners and freeholders of Bradwell should present Mr. Thomas Burgoyne with some token of esteem for his philanthropic interest and valuable assistance on their behalf." After a vote of thanks to Mr. B. Somerset, for presiding on the occasion, the meeting broke up.

CASTLETON.—On Thursday night, the 14th inst., a numerous attendance of miners and others from remote places took place for the same purpose at Castleton, when Mr. Burgoyne addressed the audience, explaining the nature of the bill. After Mr. Thomas Hall and others had spoken, and a vote of thanks been proposed and carried unanimously to Mr. T. Burgoyne, they immediately commenced signing the petition.

GREAT MINING MEETING AT EYAM.—The freeholders, tenant farmers, tradespeople, and manufacturers, together with the entire body of miners contained in the parish of Eyam, assembled in the open air, on Monday evening, in front of the Public Library, for the purpose of listening to the arguments adduced by Mr. Burgoyne, against the amended bill for the rating of mines. An intense interest and enquiry pervaded the meeting, in regard to the sentiments entertained by the members for the northern division of the county of Derby; and some anxiety being expressed as to whether Mr. G. H. Cavendish would feel disposed to uphold the mining interest of the Peak in this crisis, and under the relative circumstances, the speaker, after detailing some preliminaries respecting the origin and constitution of the late bill, declared that he could no longer withhold from them intelligence of the most satisfactory description, and which would dispel the illusion under which they, with many others in the Peak, appeared to labour; and in so doing, informed the assemblage that anxiety on that head was quite unnecessary, for amongst the dozen letters he had received from Members of the House of Commons, representing various divisions of counties and boroughs in England, there were none which grappled with the subject more fairly and fearlessly than one which came to hand yesterday, from the Hon. G. H. Cavendish, M.P. Mr. Burgoyne proceeded to observe, that if words had any meaning at all, and he had known sufficient of their Members for many years confidently to inform them that every assurance held out by the honourable gentlemen would be fulfilled to the letter; consequently, after reading to them the last letter of Mr. Cavendish, they would at once perceive that their representative was as deeply anxious as they were themselves that the mining interest of the High Peak should escape injury on the present occasion, and should not be selected as a sacrifice whilst other interests equally liable to the imposition of the rate remained exempt. Mr. Burgoyne further reminded the audience, that on the present occasion, although at considerable sacrifice to himself, he was, *pro tem.*, the servant of the public, and it would be very wrong and unbecoming of him, especially when wrong impressions floated, if he had it in his power and did not correct them; and he could not do that better than by reading the rejected and the amended bill, as well also some of the letters of M.P.'s, who had evinced great interest in the well-being of the county of Derby, amongst which will be found below those containing most practical and useful advice from Mr. Hadfield, the able M.P. for Sheffield. He commenced with Mr. Cavendish's first letter, which will at once show that, in consequence of absence from town, he had not had the opportunity of becoming so acquainted with the merits of the bill as he otherwise would have been; and we believe the measure was being so quietly carried, without any opposition or enquiry from without, that the majority of M.P.'s knew as little about it as Mr. Cavendish, and were less conversant with the general subject. We also give Mr. Burgoyne's reply to Mr. Cavendish's last letter, which was read, approved, and adopted by the committee:—

Belgrave-square, June 16.—SIR: I received your letter just before leaving London for Portsmouth with one of my sons. Since I returned I have had some conversation on the subject with Mr. Thornhill and Sir J. Paxton, and we mean to have a meeting of members representing mineral districts. I spoke to Mr. Baines, the Poor Law Commissioner, on the subject last night. He informs me that he is not aware the Government have been consulted in the matter at all, that the bill has been brought in by the Cornish Members, but he personally is certainly friendly to the principle of rating mines, and that it was recommended by a committee of the House of Lords who looked very closely into the subject of rating, and that it has also been recommended by the Poor Law Board.

I told him of all the difficulties and hardships which would occur in such a district as ours, where the mines are generally owned by very poor men, who were content to get very low wages without any profit, preferring the independence of working for themselves to getting higher wages as day labourers. I also told him of the great uncertainty attending our mines. In reply to that he said, that under the Poor Law Amendment Act, which is now universally acted on, the value of any property was rated at "what it would let for, the lessee paying all rates, taxes, and other charges," and that the uncertainty of the return would, of course, be taken into consideration. He thought there could be no valid objection to the principle of rating mines, though it might require some consideration to settle the details. I should be inclined to say, myself, that you will not, eventually, be able to resist the rating of lead mines, or any other tangible property; but I agree so far with some of the Derbyshire petitioners, that if a change in the custom of rating is to take place, it should not be done piecemeal, but should affect other property hitherto not rated as well. I believe the argument of the Cornish Members is, that the lead mines in that county (Redruth is instanced) have brought a very large population together into very poor parishes, and that all the rates fall entirely on the land.

I do not think that is generally the character of our mines, and what is good for Cornwall will not be applicable to Derbyshire. I think the fair thing, if you could carry it out, would be that all property should be rated to the poor; and it certainly seems to be an anomaly that in such a district as Grassington, near Bolton Abbey, the proprietor of the mines should be receiving a large rental and should pay no rates, while poorer individuals, occupying land in the neighbourhood, are called upon to pay rates to repair the very highway over which his lead and materials for mining travel. A very hard instance of this actually came before our turnpike committee last year, where the repairs of the road leading up to Mr. Beaumont's Mines in Durham were thrown on the parishes, while Mr. Beaumont, who derived an enormous income from these mines, was not called on to pay one penny. The miners of Derbyshire may however, depend upon it that my best attention shall be given to the matter, and that nothing shall be done without their receiving ample notice, and all the information I can give you on the subject. It is a matter which will materially affect a very honest and hard-working body in our county, and it will be a real pleasure to me, if it were not already a duty, to attend to their interests. G. H. CAVENDISH.

Eyam, June 13.—SIR: Your favour of yesterday's date is duly appreciated, and we infer therefrom that the rating of mines is deemed matter of sufficient importance to insure further enquiry. The various phases of this intricate subject laid bare in your very comprehensive letter last received, are features in the case that naturally suggest themselves to every one conversant with the matter in all its relative bearings; and the intention of the Members representing mineral districts to take counsel together on the subject is extremely desirable, and will doubtless be very satisfactory to their constituents. The declaration of Mr. Baines, the Poor Law Commissioner, that he personally is friendly to the principle of rating mines, is, by no means calculated to take any one by surprise; but that a committee of the House of Lords, after looking closely into the subject of rating, should have selected and recommended the rating of mines, without also extending their recommendations to other objects equally liable in equity, is somewhat remarkable, and to use the appropriate words of your excellent letter, selections should not be on the "piecemeal" scale, whilst so many unassessed, or only partially assessed, objects fairly present themselves, and in such amplitude that the most voracious Poor Law Board may have its voracity appeased by a "full meal." Whenever it is prepared by legislative honesty and intelligence to extend the liability to assessment to the objects not now assessed, or only very nominally or partially so. However, as this phase of the case relates more to the great question of an entirely comprehensive scheme of rating, in which no description of property shall be exempt from the payment of its quota, an examination of its merits would be too engrossing to allow the attainment of the object intended by the present letter—viz., an examination of the propriety or impropriety of rating mines in accordance with the provisions of the amended bill for that purpose.

The rejected bill provided on paper a scheme for rating metallic mines uniformly with coal mines, at the bare mention of which the most uninitiated laughed. The only other provision contained in this bill, which, however hastily and inconsiderately got up, was nevertheless designed to rule and affect the interests of tens of thousands of the English people, had reference apparently only to those adventurers who possess their mines on lease, and were in possession of such leases before the passing of such intended bill, and who paid their dues in money, and not in kind, such occupiers were to pay one moiety of the assessment, and the lord the other; consequently, the payment of rates on dues, as now paid by the lords, did not come within the scope of the bill at all; and as the Act which levied the rate on them would have been superseded by the late rejected bill, the consequence appears *advis* would have been, in this

district, where we know nothing of leases, that the two meagre provisions of that Act would have enabled the lords to transfer their responsibilities in that respect to the adventurers, who were to have been rated after the manner of coal mines; and in this, apparently, the Members for Cornwall, the House of Lords, the Poor Law Commission, and the Poor Law Board, were likely to concur.

So much for the Legislative ability of the county of Cornwall, or the alternative—the acquiescence of its representatives in the undigested scheme of the Poor Law people. Our next enquiry is, does the amended bill display any more tact, legislative ability, or determination to deal fairly with the mining interests? We fear not. As the sum and pith of the amended bill is "that the annual rateable value of every mine indiscriminately, whether paying dividends or issuing calls, shall be the amount paid to the lord in dues during the year ending the 25th day of March preceding the assessment," the injustice and inconsistency of this provision compels us to regard this as peculiarly absurd, inasmuch as in consequence of great natural facilities, derived from the presence of day levels, water-power, &c., one mine having such adjuncts, and only raising 30 tons of ore per month, may find it convenient to return to each shareholder 25 per cent. profit; whilst a neighbouring mine, much more productive, producing even 40 tons per month, is so beset with obstacles to an economical production of ore that the affair positively does not pay its way, and absolutely requires, in addition to its ore, a call on the shareholders to enable it to proceed. As each of these mines pay one uniform rate of dues, say 1-13th to the lord, the 1-13th paid by the mine working to loss must be placed where it cannot but increase or add to the item of loss in the balance-sheet; consequently to impose a rate on that 1-13th would be to levy the rate on an absolute loss in the case referred to, and such an act of indiscriminate legislation would not only be highly unpopular, but very un-English in its tendencies, and quite as absurd as the attempt to rate metallic mines after the manner of coal mines, inasmuch as all taxation supposes the object taxed to be property in the popular and general acceptance of the term, but to impose a rate on a class of non-dividend paying mines, that are in reality nothing more than underlings going on for the purpose of ascertaining whether the return shall eventually exceed the outlay, and until that be accomplished evidently the object can never become property in the sense implied in every mode of rating hitherto adopted.

On the continent of Europe no dues are paid until the mines make a profit, but here, of the first ore raised 1-13th goes to the lord, without any consideration of the cost of getting—consequently, 1-13th of the ore raised from mines that are making a loss, and withdrawn from the credit side of the balance-sheet, is a loss, and to levy a rate on that loss is a species of contemplated legislation without a precedent, and can only succeed by a violation of long-cherished English maxims. Had the Poor Law Board, or their partisans, the Members for Cornwall, produced an outline for the rating of mines, and the provisions of which had declared that the dues on the one hand should have been rated and paid by the lords, and the dividends on the other rated and paid by the recipients thereof, any dissent from this rule of rating the profits would have proved difficult, and ultimately useless; providing, also, that due consideration had been given to the fact that in every case where, for instance, the return of a farm, and the profits of a mine, were each (say) 300, per year, according to all true statistics the mine returns ought to be assessed at six times less than the assessment levied on the rental of the farm, because mines are supposed in four years either to cease paying dividends on an average, or, what is tantamount, to require an outlay again in their restoration, so that a rule much acted upon in the purchase of dividends-paying mines is a four years' purchase; whilst land, in consequence of the continuous character of its yearly returns, is estimated at thirty years' purchase, having an advantage of twenty-six years' purchase over mines—consequently, the cost of land producing a rental of 300, per year, in fairness would be called upon to pay an assessment to the poor six times more than the mine producing 300, per year, inasmuch as a fair price for the purchase of the estate of 300, rental would probably be 9000, or thirty years' purchase; but the price of the mine, according to the usual statistics, would be a four years' purchase, or 1200; therefore, to rate each kind of property uniformly, because for a time they produced an equal return, would be on a principle totally irreconcilable with justice. But the rating of mines is so objectionable that the adoption of even this mode could only be deemed an acknowledgment—that there be a general assessment of all objects that are in equity equally liable with mines to be assessed to the poor.

On the other hand, if there be not such a general revision of the principle of rating, so as to embrace the objects that are not rated, or only very partially so, then in all fairness mines may well, from their uncertain character, have the first claim to exemption; but under any circumstances, should the House of Commons pass the amended bill, a proviso ought to be attached, to the effect that the recipient of the dues so rated should on all occasions pay the poor rates on the same, until the mine gives evidence of its value to the advantage, by the payment of dividends, on the attainment of which the rates on the dues might then be paid jointly.

The Hon. G. H. CAVENDISH, M.P.

THOMAS BURGOGYNE.

After listening very attentively to the address of the speaker to the termination, the meeting concluded with a vote of thanks to Mr. Cavendish and the other gentlemen who had given their assistance to the mining interest on this occasion, and also to the speaker, and the company retired, fully determined to do their utmost to obtain the withdrawal of the bill.

THE IRON AND METAL TRADES OF SOUTH STAFFORDSHIRE.

[FROM OUR CORRESPONDENT IN BIRMINGHAM.]

JUNE 21.—I am sorry to have to report a considerable drawback upon the rather favourable turn which had taken place in the iron trade. More failures have been announced since my last letter, and others are, in all probability, very improperly predicted. Messrs. Hickman, of Bilston, have been obliged to place their affairs in the hands of their solicitors, and their creditors have been apprised of their difficulties. The firm of Whitehouse and Jeffries, of West Bromwich, are in the same situation, and a special meeting of their creditors is called for to-morrow, at the Queen's Hotel, in this town. The liabilities of this house are estimated at 100,000*l.*, which include, it is said, debts belonging to Mr. Jeffries, of Hartshill, who is also involved in the failure. Mr. Spencer, brother of the ironmaster whose affairs have recently been before the Bankruptcy Court, is also embarrassed by recent failures, and his affairs are also undergoing investigation. Three failures, added to the other suspensions which had previously taken place in the district, are causes of discouragement, and have produced a most depressing influence. Nor has the result of the enquiries into the affairs of Davies and Son, by the committee, so far as they have progressed, very materially relieved the anxiety of those interested in their concern. The full amount of the liabilities have not yet been ascertained, but it is feared they will exceed rather than come under the largest sums yet stated. Nor are the assets found to be larger, or of more easy realisation than was anticipated; and the committee are as yet unable to report. They met on Monday, at the Queen's Hotel, Charles Shaw, Esq., occupying the chair; and from his statement it would seem that some time must yet elapse before the committee can arrive at a satisfactory solution of all the complications in which the estate is involved. The Dudley and West Bromwich Banking Company hold large securities; and it is Mr. Shaw's opinion that they were sufficient to have enabled the bank to have sustained the firm. His opinion is, that they ought not to have been allowed to go down. It is, however, much easier to say so now than it would in all probability have been to continue advances for such extensive works, with an over-drawn account to the amount of many thousands of pounds, and other difficulties which could not have been overcome. The committee are most desirous of carrying on the works for the benefit of the creditors, and it is believed that arrangements are being entered into with the Birmingham Banking Company for the necessary means to carry them on. Indeed, as a consequence of this very heavy failure, and other circumstances, the latest rumour in commercial circles is that negotiations are pending for an amalgamation of the Dudley and West Bromwich Bank with our own, an event which would certainly make the latter one of the most important establishments of the kind in the kingdom. As it is, it ranks high, but with an accumulation of business, such as a transfer like that spoken of would create, it would be a most extensive proprietary, in all respects commensurate with the growing wants and requirements of the district.

Beyond rumour, however, amongst those well informed on such matters there is nothing publicly known. Relative to the other failures which have been so often noticed, little more is known by the creditors than that the solicitors and others engaged in winding them up are still at work, and unable to announce anything like final dividends. In the midst, however of all these embarrassments, it is nevertheless satisfactory to know that the general prospects of the trade are improving. There is evidently an increased demand for the home and foreign markets, and the large houses are maintaining prices. From America, we have had some good orders for rails, and our own manufacturing districts have, within the last fortnight, supplied some useful order sheets.

The Building Trade has taken another brisk start in Lancashire and Yorkshire, and the demand for nearly all description of iron has materially increased. Add to this the incessant orders for shot and shell, heavy ordnance, small arms, bullets and bayonets, bodsteads, couches, &c., for the war, and the consumption of iron must be still immense, and such as would have caused a few years ago what would be termed a roaring trade. Our powers of production, however, being immense, they overrun all ordinary demand. Considerable importance is attached to the forthcoming preliminary meeting of the trade. By some it is hoped that the commercial atmosphere may be so far cleared as to enable the leaders of the trade again to take their position, and once more fix prices to which they can and will adhere; and if the late wrecks will have the effect of clearing away over-grown burdened stocks, which have been perplexing the independent dealer, and putting an end to the bill flying, which has been carried on to such a great extent, no great harm will result from the present turning over of accounts.

In the Copper and Tin Trades prices firm, although demand limited. At the large Brass Works, including those of Messrs. Winfield, Messinger and Co., Salt and Co., the hands are not so actively employed as heretofore, on the varied articles in which they are usually engaged.

The General Hardware Trade is also rather inactive, but there is more disposition to make for stock than heretofore.

Owing to the recent reduction of interest by the Bank of England, the

WEEKLY LIST OF NEW PATENTS.

mine have been conducted, as to the early success of the undertaking. They who declared that Jamaica contained no continuous veins of copper ore, but produced ore superficially only, or in patches, have been already contradicted, in the instances of the mines of Hill, Clarendon, and Silver Hill. In addition to the above interesting intelligence, we have been informed that several large shareholders have received private information, fully confirming the steady progress of mining in Jamaica; and during the present week many enquiries have been made for shares in the Clarendon, Port Royal, and other Jamaica mining companies.

IMPROVED GOLD DIGGER'S CRADLE.—It is always pleasing to a journalist to be able to record any meritorious discovery, more particularly when made by a townsman; and, on the subject of the cradle, taken from an article in an Australian paper, we are afforded an opportunity of doing so. The following paragraph is the son of Mr. Harrington, draper, in this city, who has used the Carlisle three years since, at the time when many other adventurous youths sought their fortunes by emigrating to Australia, the Dorado of promise:—"A young gentleman, by the name of Mr. Henry Harrington, who is now a digger on the Wombatta, Jim Crow, musing over the clumsiness of the tools used in mining pursuits, thought the cradle, above all others, ought to undergo some alteration, and, settling to work at last hit upon the very thing that must make every gold-seeker rejoice. The new-fashioned cradle costs but a trifle, and is very light; can be worn on the top of the head, and carried twenty miles with comparative ease. It will not lose the smallest speck of gold; I have seen some stuff which went through other cradles tried in it, and great washing that was said moderate waste. The cradle is sent to the Messrs. Chumace Hotel, Dalrydford, Wombatta, by applying to Mr. D. E. Rowland."—*More Alexander Mail.* Nothing is more clear than an invention for the improvement of an implement commonly used in extracting gold from the earth must be of great value; but when it is considered that the cradle has been long in the hands of hundreds of thousands of individual diggers, one might suppose that it had before this time arrived at such a state of perfection as to leave little for an ingenious brain to operate upon. The longer anything has been in common use the higher the merit of any discovery for its improvement. There are few in Carlisle who do not remember the spirited youth whose name stands recorded as the improver of the gold cradle; he was a great favourite with all who knew him. The graphic pictures he so quickly produced from the most trifling incidents, became better known to the public than his name. This may prove a very valuable improvement in making mines profitable which would not be so by any imperfect system of washing. Next in importance in discovering mine is the economy of working it; even the facility of removing tools from place to place, in search of better ground, is of great value to a gold digger.—*Cheshire Post.*

GEOLOGICAL AND MELBOURNE RAILWAY COMPANY.

Incorporated by an Act of the Victoria Legislature, 6th February, 1853.
Capital £250,000, in 17,500 shares of £20 each.
Bearing a minimum interest of 5 per cent. per annum.
Guaranteed by the Colonial Government for 21 years, and payable half-yearly, viz., on 20th April and 20th October, in the colony and in London.

DIRECTORS.
CHARLES NUTTALL THORNE, Esq., J.P.—PRESIDENT.
JAMES BUCHANAN HUTTON, Esq.—VICE-PRESIDENT.
GEORGE BOARD, Esq., J.P.
W. G. McKELLAR, Esq., J.P.
Appointed by Government: CHARLES EDWARD STRUTT, Esq., J.P., Immigration Agent.
JOHN GUTHRIE, Esq., J.P., Collector of Customs.
Solicitor: J. A. Gregory, Esq.
ENGINEER AND ARCHITECT—Edward Snell, Esq.
SECRETARY—Martin Sholl, Esq.
BANKERS—Bank of New South Wales; Bank of Victoria.

LONDON OFFICE.
MANAGER—S. J. Cooke, Esq., 36, Cannon-st., late Treasurer to the Colonial Government, and a Director of the Company.
AGENTS—Messrs. Larnach and Walker, 37, Cannon-street.
EXAMINING ENGINEERS—Daniel Gooch, Esq., C.E., Great Western Railway; Henry Stothert, Esq., Bristol.

SOLICITORS—Messrs. Goodwin and Co., 3, Lancaster-place, Strand.
BANKERS—London Joint-Stock Bank; Bank of New South Wales.
Uniform Colonial gauge of 5 ft. 6 in., as fixed by Legislative Enactment.

The excellent Sir Charles Hotham, Governor of Victoria, with the advice and consent of his Executive Council, having guaranteed a minimum interest of 5 per cent. per annum out of the Crown revenue of the colony, upon the entire capital stock of this company—viz., £250,000—the directors have placed a limited number of shares for allotment, fully paid up, through their London agency, the interest being computed from the date of payment.

Interest warrants will be ready for issue at the company's London office (now permanently established) to the shareholders on April 20th and October 20th of each year. The fourth half-year's interest was paid on the 20th April last.

The Colonial Government, deeply impressed with the importance of this undertaking, has conceded great privileges to this company. Large and valuable grants of land for the line and stations have been made, including 13 acres in the centre of the town of Geelong, for the terminus, with harbour frontages for the piers and wharves, the total value of which is not short of £120,000, being equal to one-third of the capital stock of the company, added by way of bonus to the shareholders.

The level nature of the country through which the line passes, whilst offering no engineering difficulties, and involving no expensive works whatever, is highly fertile, and already occupied by a thriving and increasing agricultural and manufacturing population.

By advices, dated 9th March last, information has been received of the favourable progress of the works, accelerated much by a reduction in the labour market. The completion of the pier and harbour branch has given considerable satisfaction to colonial shareholders, both from the facilities it affords to commercial operations in the town and district, and the encouraging prospect of revenue which it opens to the company.

Large supplies of rails and materials have been already landed in the colony, and the first shipments of locomotives and carriages have just been made by the *Adelphi* from London, and the *Donald MacKay* from Liverpool. Contracts have been concluded for all the plant and rolling stock required for the effective working of the line (which is expected partially to be opened during the present year), and the whole of which is to be delivered within the next six months.

The first series of shares reserved for this market have been issued, and the sealed certificates delivered to the allottees.

Applications are invited for the unallotted portion of the guaranteed stock, which will not be received at less than par—£20 shares, interest taking effect from the date of payment, and so endorsed upon the share certificates. S. J. COOKE, Manager, Geelong and Melbourne Railway Company's Offices, 36, Cannon-street, City, June 6, 1855.

FORM OF APPLICATION FOR SHARES.

To Messrs. Larnach and Walker, 37, Cannon-street, London.

GENTLEMEN,—I request that you will allot to me guaranteed shares of £20 each in the Geelong and Melbourne Railway Company, at _____, and I hereby undertake to accept them, or a less number, and to pay for the same on receipt of the allotment letter, receiving in exchange the share certificates bearing the common seal of the company.

Name _____
Address _____
Profession or business _____
Date _____ Usual signature _____

THE LONSDALE CONSOLIDATED COPPER AND SILVER-LEAD MINING COMPANY, ENNERDALE, CUMBERLAND.

Divided into 12,000 shares of 10s. each.

Deposit 5s. per share, and the remainder by instalments of 2s. 6d., at intervals of not less than three months.
No shareholder liable beyond the amount of his shares.

BANKERS—The London and County Joint-Stock Bank, 21, Lombard-street, London.
SECRETARY—Mr. Thomas Fuller.

OFFICE,—51, THREEDNEEDLE STREET, LONDON.

This property comprises the waste lands within the Manor and Forest of Ennerdale, near Whitehaven, Cumberland, extending over an area of many square miles, granted by the Right Hon. the Earl of Lonsdale for a term of 21 years, at 1-15th dues; this property is surrounded by well-known productive mines of copper, silver-lead, and plumbago, or black-lead, including the celebrated Borrowdale Mines.

The facility for working is almost unparalleled in the history of mining—no machinery being required, except a water-wheel and stamps, for rendering the ores marketable; the reports of agents having satisfied the directors of the value of the lodes already laid open, they are desirous of carrying on the operations of the mines on a scale adequate to their importance, and to lay open the various copper, silver-lead, and other mineral veins known to abound in this property.

The shares are issued at 10s. each; 5s. to be paid at the time of issue, and the remainder by instalments, at intervals of not less than three months, and in amounts not exceeding 2s. 6d. per share. This arrangement provides for the purchase of the lease, and all working and other costs to the present time, and leaves £3000 for the working capital of the company.

It is a fundamental principle of the company, that the directors shall not allow the mine to be at any time in debt beyond the available assets.

The directors have pleasure in referring to the reports of agents (which accompany the prospectus) who have carefully inspected this property.

Applications for prospectuses and shares to be made, on or before the 29th, to Mr. LELAND, 4, Cushion-court, Old Broad-street, and to Messrs. FULLER and Co., 51, Threendneedle-street, London, where specimens of the ore may be seen.

GRESHAM LIFE ASSURANCE SOCIETY.

HEAD OFFICE,—37, OLD JEWRY, LONDON.

Instituted A.D. MDCCCLXIII.

MATTHEW MARSHALL, Esq., Bank of England.
STEPHEN OLDING, Esq., Lombard-street.
WILLIAM SMEE, Esq., Bank of England.
WILLIAM TABOR, Esq.,—CHAIRMAN.

This office will be found highly eligible for every description of life assurance; its main features are the publicity of its accounts, and the systematic readiness of its transactions.

Perfect security is guaranteed by an ample paid-up capital, subscribed by persons of the highest character and respectability.

Policies may be effected without loss of time, formalities being carried through at the office every day.

Although the principal portion of the society's policies are upon first-class lives, its peculiar feature consists in the assurance, at equitable rates, of the lives of individuals of regular and temperate habits, but in whom health may be more or less impaired.

Policy-holders may obtain loans on real or good personal security. The directors have advanced upwards of £175,000 to the members since July, 1845.

N.B. Active and influential persons will be appointed as agents on liberal terms, in districts where the society is not already represented.

EDWIN JAMES FARREN, Sec.

HENRY J. MORTON AND CO.'S (No. 2, BASINGHALL BUILDINGS, LEEDS) PATENT WIRE ROPES, for the use of MINES, COLLIERIES, RAILWAYS, &c.; one-half the weight of hemp rope, and one-third the cost; one-third the weight of chains, and one-half the cost—in all deep mines these advantages are self-evident. References to most of the principal colliery owners in the kingdom.

GALVANISED SIGNAL CORDS AND KNOCKER LINES; will not rust or corrode, and not affected by the copper water in mines. Very strong, and not at all liable to break. Prices from 15s. per 100 yards.

PATENT ASPHALTED ROOFING FELTS, 1d. per foot.

DRY HAIR BOILER FELTS, to save COAL.

PATENT BOILER COMPOUND, for bad water.

FAIRBANK'S WEIGHING MACHINES, of all sizes.

GALVANISED IRON ROOFING AND SPOUTING.

MILNER'S FIRE-PROOF SAFES.

STOCK OF MINING AND RAILWAY STORES in Liverpool and London:—viz., OILS, GREASES, COTTON WASTE, SPUN YARN, WHITE LEAD, VARNISHES, &c.; and at very low prices.—Address, 2, Basinghall-buildings, Leeds.

SOLE AGENTS for Prof. OLKMAN'S ELECTRIC SIGNAL from RAILWAY GUARD to ENGINE DRIVER, and also for the use of COLLIERIES and MINES. N.B. Illustrated price list on application.

MORTON'S PATENT WIRE ROPES.—HENRY J. MORTON AND CO., GALVANISED IRON ROOFING AND SPOUTING WORKS, IMPROVED PATENT WIRE ROPES, for MINES, COLLIERIES, RAILWAYS, &c. References to all the large colliery owners in the kingdom. One-half the cost of hemp or chain, more durable, and one-third the weight of chain—very important advantages for deep mines.**FAIRBANK'S IMPROVED PATENT WEIGHING MACHINES.**

For the use of IRONWORKS, COLLIERIES, RAILWAYS, WAREHOUSES, STORES, &c. The most ACCURATE MACHINES in use, and the cheapest.

MACHINES of all sizes, from 1 cwt. to 30 tons, for RAILWAY WAGONS, CARTS, or WAGONS.—For prices and all other information, apply to HENRY J. MORTON and Co., Galvanised Ironworks, 2, Basinghall-buildings, Leeds.

Asphalted Roofing Felt, Boiler Felt, Galvanised Iron, &c., in Stock.

CHEAP, LIGHT, AND DURABLE ROOFING. ONE PENNY PER FOOT.—HENRY J. MORTON AND CO., 2, BASINGHALL BUILDINGS, LEEDS. PATENT ASPHALTED ROOFING FELTS, for roofing sheds, contractors' cottages, ore-dressing sheds, brick and tile sheds, and all agricultural purposes. One penny per square foot. The cheapest roofing manufactured. Stocks kept in London, Leeds, and Bristol. DRY HAIR BOILER FELTS, for saving fuel.

H. J. MORTON AND CO., 2, Basinghall-buildings, Leeds.

RAILWAY WAGONS.—WM. A. ADAMS, MIDLAND WORKS, BIRMINGHAM.

BROAD AND NARROW GAUGE COAL AND IRONSTONE WAGONS, IN STOCK—FOR SALE OR HIRE.

RAILWAY WHEEL AND AXLE WORKS.—GEORGE WORSDELL AND CO., WARRINGTON, MANUFACTURERS OF EVERY DESCRIPTION OF HAMMERED IRON, TYRES, AXLES, &c.

INGLIS AND CHISHOLM, MANCHESTER, MAKE SMALL STEAM-ENGINES for MINERS, CONTRACTORS, &c.; also, DRILLING, PUNCHING, and SHEARING MACHINES, and OTHER TOOLS, of the best quality, at a reasonable price.—Address, INGOLDS and CHISHOLM, Charles-street, Garratt, Manchester.

EDWARD RUSSELL, ALMA TUBE WORKS, WALSALL, MANUFACTURER OF WROUGHT IRON TUBING for GAS, STEAM, and WATER; STOCKS, TAPS, and DIES; and ALL KINDS of GAS FITTINGS.**TO IRONMASTERS, MERCHANTS, CONTRACTORS, FOUNDERS, &c.—Messrs. DAUNT and MOFFAT, METAL BROKERS, 59, ST. VINCENT STREET, GLASGOW, OFFER THEIR SERVICES for the PURCHASE and SALE of PIG and MANUFACTURED IRON.**

All orders carefully executed, and prompt shipments made.

THE MIDLAND IRON COMPANY, ROTHERHAM, YORKSHIRE, MANUFACTURERS OF RAILWAY TYRES AND AXLES FOR LOCOMOTIVE ENGINES, CARRIAGE AND WAGON WHEELS.

From the tests to which this iron has been submitted by engineers and railway companies during several years, its superior quality has been generally acknowledged, and can be unhesitatingly affirmed.

THE PERMANENT WAY COMPANY, holding a large number of PATENTS relating to the CONSTRUCTION and REPAIRATION of the PERMANENT WAY of RAILWAYS, are at all times ready to communicate on the subject, and to GRANT LICENSES for their USE.

From the facilities thus afforded to companies to negotiate for a number of inventions, much trouble and chance of litigation is avoided. The company undertake arrangements for bringing new inventions on the subject before the public, upon terms advantageous to the proprietors of patents.

Applications may be made to CHARLES MAY, F.R.S., the manager, or to WILLIAM HOWDEN, Sec., 26, Great George-street, Westminster.

NORRIS'S PATENT RAILWAY CHAIR COMPANY beg to draw the attention of railway companies and engineers to NORRIS'S PATENT RAILWAY JOINT CHAIRS. This patent has received the unqualified approbation of some of the most eminent engineers of the day, as the most effective, economical, and perfect joint in use at the present time. The simplicity of its construction is such as will allow of its application to any line of railway, without causing the slightest hindrance to the ordinary traffic during the time that it is being laid down.

The saving in the preservation of the permanent way and rolling stock by the application of Norris's Patent is incalculable; and wherever adopted must very considerably decrease working expenses.

To railway companies, having old and bad roads, the principle is peculiarly advantageous, as its application will not only restore the road to a perfectly safe and serviceable state for many years, but, at the same time, bring into efficient use all the old and broken chairs.

To the railway world in general it is of the greatest value, as it admits of the easiest locomotion, and is most simple and economical in principle.

Every information will be given, and models forwarded for inspection, on application to the manager, at the offices of the company, Wolverhampton.

TO ARCHITECTS, SLATE MERCHANTS, BUILDERS, AND OTHERS.—THE DIRECTORS of the MACHNO SLATE AND SLAB COMPANY having completed their arrangements for the REMOVAL of their SHIPPING PORT to CONWAY, for the convenience of vessels unable to lower their masts to pass the tubular bridge, are now PREPARED to RECEIVE ORDERS for their justly celebrated SLABS and SLATES, from the Festiniog vein, which for beauty of colour and durability are unequalled.

The slabs have been largely used in the construction of houses for Australia; and, from the facility with which they are erected and removed, are well adapted for movable ranges for men and horses at the proposed camps in England and Ireland.

All applications to be addressed to Mr. T. H. WHEELER, the resident director, at the company's offices, Conway, North Wales.

IMPORTANT TO LEAD SMELTERS.—THE INVENTOR is PREPARED TO CONSTRUCT, upon liberal terms, a DOUBLE REVERBERATORY FURNACE, capable of making a SAVING of 50 per cent. FUEL over that of the best constructed furnaces in Europe; at the same time guaranteeing the general loss in smelting not to exceed 5 per cent.

The inventor, after 20 years' experience, both in England and various parts of the Continent, has discovered the method, in the regular course of smelting, and without any extra cost, of separating antimony from a certain class of silvery-lead ore, thereby rendering the lead free of all impurities, and, at the same time, the antimony in a marketable state.—All letters to be addressed to "C. J. R., Mining Journal office, 26, Fleet-street, London. A perfect model is to be seen on application to the inventor.

DR. COLLYER'S AUSTRALIAN GOLD, TIN, AND COPPER MACHINERY.—DR. COLLYER informs those who are interested in mining property that he has APPOINTED RANSOMES and SIMS SOLE MANUFACTURERS in ENGLAND of his PATENT MACHINERY; and that they are prepared to SUPPLY the same on the following cash terms:—

Large size crusher, with shoes, capable of reducing from 10 to 12 tons of ore per day. Power required (say) eight horses £120 0 0
Small size crusher, 5 to 6 tons per day. Power required (say) three horses 90 0 0
Gold separator, capable of washing alluvial earth, from 10 to 12 tons per day. Hand-power 50 0 0
Extra shoes, large size, £20; small ditto £10 each—capable of reducing 1000 tons. (No part of this machinery exceeds 15 cwt.)

N.B. These machines are particularly adapted for the reduction of tin ores.—For further particulars, address RANSOMES and SIMS, Ipswich.

HALSEY'S PATENT CRUSHER AND AMALGAMATOR.—THIS machine is NOW IN OPERATION at ESSEX WHARF, ESSEX STREET, STRAND. GOLD ORES carefully TESTED on the following terms, including the use and distillation of mercury:—

Samples not exceeding 5 cwt. £1 10 0
" " " 10 cwt. 2 0 0
" " " 1 ton 2 15 0
" " " 2 tons 3 15 0
" " " 3 tons 4 10 0
" " " 4 tons 5 0 0

Larger quantities by special agreement. Price of the machine complete, £200.

TO MINING COMPANIES, MINERS, &c.—QUARTZ, TIN, COPPER, and OTHER ORES reduced to a FINE POWDER at a SMALL COST. Foreign miners and others with limited power will find in this machinery everything they require. Parties wishing to prove it may have samples reduced any day at J. WALKER'S, patentee, 17, Copper street, City-road, London.

HAY PRESSERS, double action, new and powerful, largely patronised by Government.

STATIONARY STEAM-ENGINES on SALE, of 2, 4, 6, 8, and 12-horse power, with or without boilers; the 4-horse and upwards are fitted with separate expansion gear.—Apply to Messrs. GUNN and Co., Engine Works, Leicester, who will tender for their erection in connection with wind or water corn mills, farms, saw mills, or for any manufacturing purpose, including shafting or other mill work, without extras. Twelve months' warranty given.**STEAM-ENGINE AND WEIGHING MACHINE.—FOR SALE, ONE NEW 20-horse HIGH-PRESSURE HORIZONTAL STEAM-ENGINE, cylinder 16 in. diam., 3 ft. stroke, either with or without boiler. ONE NEW 6-ton WEIGHING MACHINE, fitted with compound bright lever, to weigh tons and short weight.—Apply to Messrs. WATSON'S, Dudley Foundry, Dudley.****ARMSTRONG'S PATENT HYDRAULIC CRANES.—TO BE SOLD, BY PRIVATE CONTRACT, a PAIR of 1-ton CRANES, of the above description, quite new, with steam-engine, complete. They are suitable for a wharf, or for the deck of a ship.—For price and particulars, apply to SMITH, SCURFIELD, and Co., 3, Cross-lane, St. Mary-at-Hill, London.****MINING.—PATENT PUMPING AND WINDING STEAM-ENGINES, MADE PORTABLE, and MOUNTED ON BROAD WAGON WHEELS, TO BE LET ON HIRE, OR FOR SALE.—All interested in mining are invited to INSPECT MEDWIN AND HALL'S PATENT PORTABLE STEAM-ENGINES (See the Reports of this Journal).**

Several of these engines are in stock, and ready for immediate delivery, of 8, 10, 12, 16, 20, 25, and 40-horse power, adapted for mining and other purposes. They possess advantages of strength and simplicity over all other portable engines; and may be seen at Messrs. MEDWIN, HALL, and Co's, sole patentees and manufacturers, 92, Blackfriars-road, London.

PATENT SAFETY FUSE.—THE GREAT EXHIBITION PRIZE MEDAL was AWARDED to the MANUFACTURERS of the ORIGINAL SAFETY FUSE, BICKFORD, SMITH, DAVEY, and PRYOR, who beg to inform Merchants, Mine Agents, Railway Contractors, and all persons engaged in Blasting Operations, that, for the purpose of protecting the public in the use of a genuine article, the PATENT SAFETY FUSE has now a thread wrought into its centre, which, being patent right, infallibly distinguishes it from all imitations, and ensures the continuity of the gunpowder.

This Fuse is protected by a Second Patent, is manufactured by greatly improved machinery, and may be had of any length and size, and adapted to every climate.

Address, BICKFORD, SMITH, DAVEY, and PRYOR, Fackingham, Cornwall.

SAFETY FUSE.—Messrs. WILLIAM BRUNTON and CO., PEN-HALLICK, near REDRUTH, CORNWALL, MANUFACTURERS of FUSE, of every size and length, as exhibited in the Great Exhibition of 1851, and supplied to the Royal Arsenal at Woolwich, the Arctic Expedition, and every part of the globe.

Messrs. BRUNTON & Co. are at all times PREPARED to EXECUTE UNLIMITED ORDERS for SUPPLYING FUSE direct from their own MANUFACTORY, upon warrant that it will prove equal to, if not better, than any to be procured elsewhere.

ASSAYING.—CITY SCHOOL OF CHEMISTRY AND ASSAY OFFICE, DUNNING'S ALLEY, BISHOPSGATE STREET WITHOUT.

Conducted by JOHN MITCHELL, F.R.S., Author of Manual of Practical Assaying, Manual of Agricultural Analysis, Treatise on the Assaying of Food, Metallurgical Papers, &c. ASSAYS and ANALYSES of MINERALS, METALS, and every manufacturing product.

SPECIAL INSTRUCTION in ASSAYING and CHEMISTRY for gentlemen intending to proceed to the colonies.

LEE STEVENS'S PATENT FURNACES comprise an established SYSTEM of SMOKE PREVENTION and ECONOMY of FUEL, for all manufacturing purposes, from the smallest pan to the largest copper or boiler; and is remarkable for simplicity, cheapness, and facility of adaptation. Average saving of fuel, 20 per cent. Drawings of hundreds of furnaces in successful operation, testimonials, official reports, &c., may be seen at 1, Fish-street-hill, City.**EMIGRATION.—AUSTRALIA AND AMERICA.**

Parties with limited means wishing to proceed to the above or other colonies are advised to make arrangements prior to the Passengers' Act Amendment Bill, now before Parliament, being passed, which will tend materially to increase the expense. Present rates, landing passengers and goods on the wharves free:—Melbourne, £25 15s.; New York, £3 10s.; Boston, £4 12s.

WILLIAM BARNETT and CO., 25, Philpot-lane, London.

MESSRS. GWYNNE AND CO. are PREPARED to GRANT LICENSES for the REDUCTION of IRON, COPPER, LEAD, TIN, and OTHER ORES, FUSING and REFINING METALS, CEMENTATION of STEEL, &c., by their NEWLY PATENTED PROCESS.

Results can be produced in less than half the time at present required, and it is expected eventually in practice it will not exceed one-third, reducing the cost of the best steel to one-half its present price, with a corresponding saving in time and reduction in price in all other metals.

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10000	East-Trelawny (sil.-ld.)	...	1	...	1 1/2	6000	Severn (lead, cop.)	...	1 1/2	...	3
10000	East-Trelawny (sil.-ld.)	...	1	...	1 1/2	10000	Severn (lead, cop.)	...	1 1/2	...	3
10000	East-Trelawny (sil.-ld.)	...	1	...	1 1/2	10000	Severn (lead, cop.)	...	1 1/2	...	3
10000	East-Trelawny (sil.-ld.)	...	1	...	1 1/2	10000	Severn (lead, cop.)	...	1 1/2	...	3
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10000	East-Trelawny (sil.-ld.)	...	1	...	1 1/2	10000	Severn (lead, cop.)	...	1 1/2	...	3
10000	East-Trelawny (sil.-ld.)	...	1	...	1 1/2	10000	Severn (lead, cop.)	...	1 1/2	...	3
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10000	East-Trelawny (sil.-ld.)	...	1	...	1 1/2	10000	Severn (lead, cop.)	...	1 1/2	...	3
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10000	East-Trelawny (sil.-ld.)	...	1	...	1 1/2	10000	Severn (lead, cop.)	...	1 1/2	...	3
10000	East-Trelawny (sil.-ld.)	...	1	...	1 1/2	10000	Severn (lead, cop.)	...	1 1/2	...	3
10000											

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10000 Anglo-Californian	1	10000 Lusitanian (of Portugal) ..	1
20000 Australian	6	1%	103815 Mariquita.....	1
60000 Australian Cordillera.....	1	...	...	...	...	20000 Mexican and South Amer.....	9	...	...	...	...
50000 Ave Maria	1	...	...	...	...	60000 New Granada	1	...	...	...	...
210000 Carsons Creek	1	...	...	...	...	200000 Nouveau Monde	1	...	...	...	...
100000 Colonial Gold	1	...	...	...	...	10000 Pontbagnad Silver-lead	20	...	...	...	...
350000 Copper Miners of England, Stock	1	...	...	...	...	100000 Port Philip	1	...	...	...	...
8000 Ditto, Pref. 7 1/2 per cent. 25	...	...	...	...	...	60000 Quartz Rock	1	...	...	...	...
70000 English and Australian Cop. 6	...	...	...	...	1%	50000 South Australian	1	...	...	...	...
25000 Fortuna	1	1%	70000 Waller	1
100000 Great Nugget Vein	1	100000 West Mariposa	1

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London: Printed by RICHARD MIDDLETON, and published by HENRY ENGLISH (the proprietors), at their offices, No. 26, FLEET STREET, where all communications are requested to be addressed.—JUNE 23, 1865.